GLYCOGENE

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V1.1

GLYCOGENE

PRODUCT CATALOG

Glycoscience Products

ABOUT US

Glycogene INC is an advanced biotechnology company founded in Wuhan with a site in Atlanta, GA. Our business spans from R&D all the way to the manufacturing stage to serve our customers in their evolving needs for high and consistent quality reagents.

Here at Glycogene, using our chemo-enzymatic and fermentation techniques, our scientific experts are more than happy to offer our expert service with high quality and competitively priced products such as nucleosides, nucleotides, phosphoramidites and carbohydrates. We also provide custom synthesis services for unique structures designed by you.

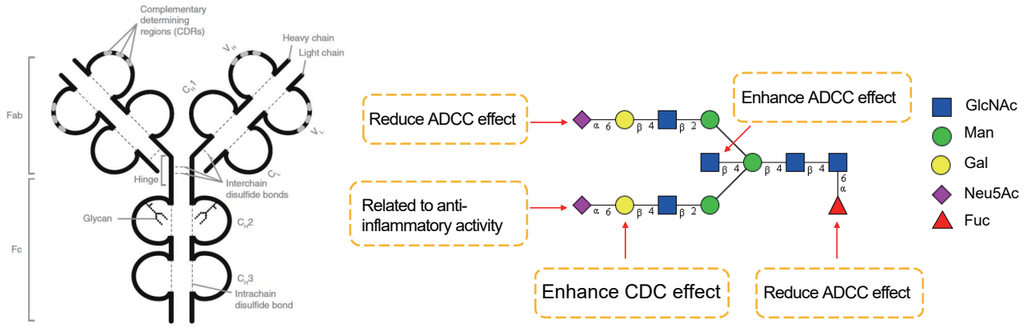
Over the years, with constant collaboration and innovation, we have enriched our product list to cover our customer’s essential needs and we continue to conduct research and expand our product line to help our customers to achieve their goal. We are always looking for new and innovative ways to expand our product line to meet our customers' essential needs.

CONTENTS

Antibody in vitro glycosylation modification technology

Background Introduction

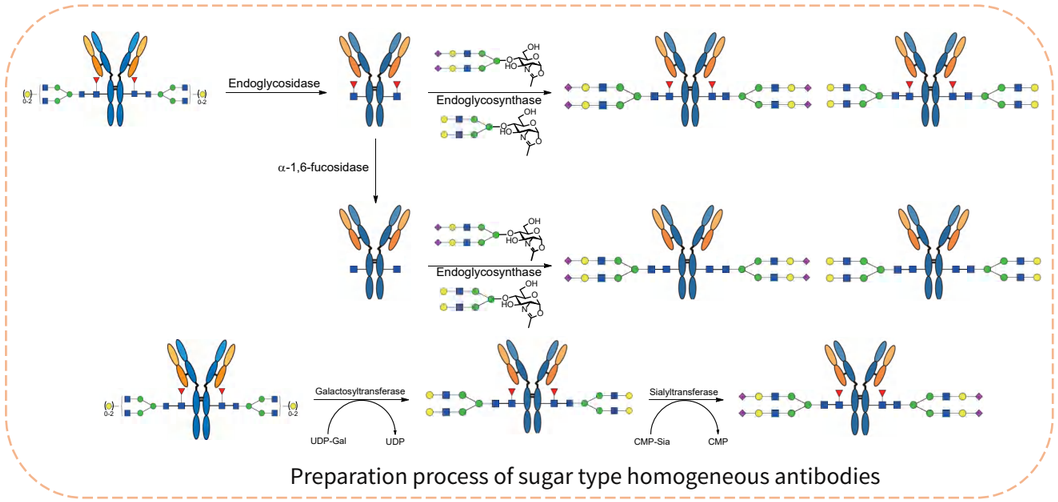
So far, the monoclonal antibody drugs sold on the market are mainly IgG type. The F7 position of the Fc region of IgG is glycosylated with asparagine, and the different sugar chains connected result in the antibodies having different sugar types. The different sugar types of antibodies can lead to differences in the immunogenicity, biological activity, pharmacokinetics, and other aspects of monoclonal antibodies.



Structure of IgG antibodies

Cell Mol Life Sci, 2017, 74, 837–847 Sci Rep, 2016, 6, 36964

Technology Platform



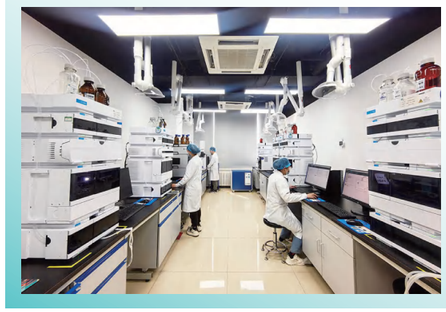
Preparation process of sugar type homogeneous antibodies

GLYCOGENE Pharmaceutical can quickly and efficiently obtain monoclonal antibodies with better homogeneity by modifying specific glycosidases and transferases.

PNAS, 2017, 114, 3485–3490 Bioconjugate Chem, 2014, 25, 510-520

Our products

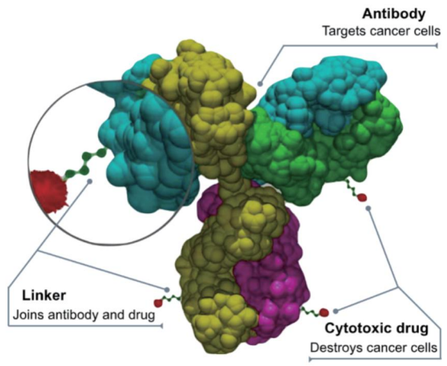
Endoglycosidase	Sugar modifying enzyme	Activated glycosyl donor
Endo-A	α2-3, 6, 8 Neuraminidase	GDP-Fuc
Endo-M	PNGase F	UDP-Gal
Endo-S	GalT	CMP-Neu5Ac
Endo-S mutant	SiaT	SGP
Endo-S2 mutant	FucT	Customized glycosyl donors
Antibody Fc glycan remodeling kit		



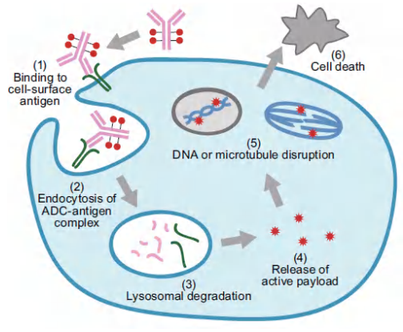
Antibody Drug Coupling Technology

Background Introduction

Monoclonal antibody drug conjugate (ADC) is a complex formed by coupling cytotoxic drugs with monoclonal antibodies through linkers. ADC drugs consist of three parts: antibodies, linkers, and chemical drugs. The selection of targets and the quality of antibodies determine the affinity of ADC to tumor cells; The type of linker determines the stability of the drug; The choice of chemical drugs determines the lethality and side effects of ADC.



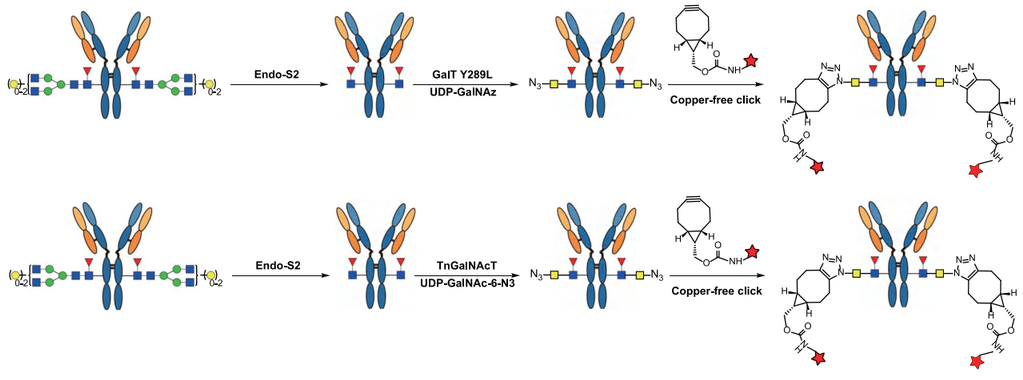
Basic structure of ADC drugs



The mechanism of action of ADC drugs

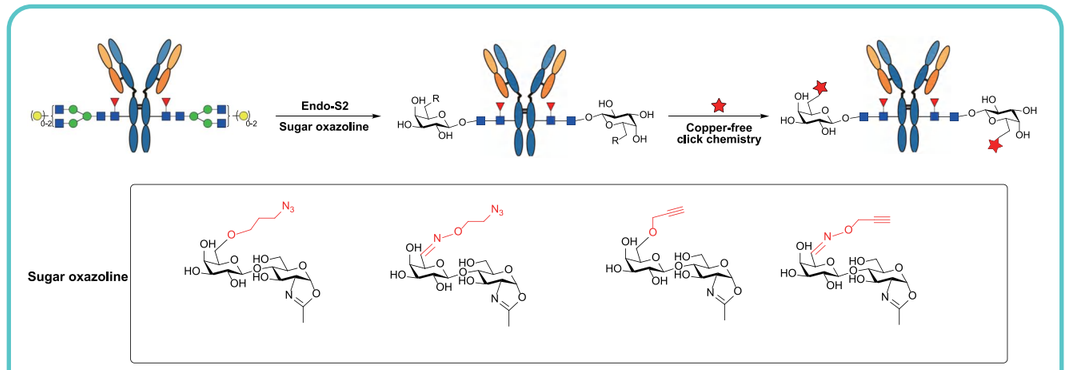
Protein Cell, 2018, 9, 33–46

Technology Platform



Glycosyltransferase catalyzed antibody N-glycan site-specific coupling technology

Bioconjug. Chem. 2015, 26, 2233-2242;
Bioconjug. Chem. 2022, 14, e2078466

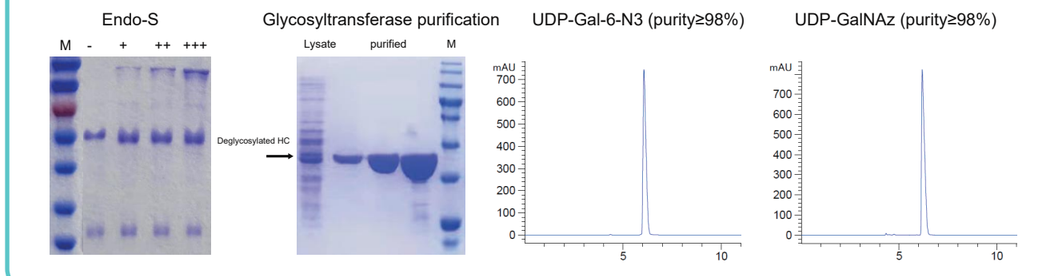


Glycosyltransferase catalyzed antibody *N*-glycan site-specific coupling technology

Acta Pharmaceutica Sinica B. 2022, 12,2417-2428

Our products

Endoglycosidase	Glycosyltransferase	Activated glycosyl donor
Endo-S/S2	GalT	UDP-Gal-6-N3
Endo-S/S2 mutant	TnGalNAcT	UDP-GalNAc-6-N3-eu5Ac
SpBgaA	GalT1 (Y289L)	UDP- GalNAz
Fc glycan conjugating ADC kit		



Glycogene Recombinant Protein Expression Service

- E. coli Expression System
- Yeast Expression System
- Insect Baculovirus Expression System
- Mammalian Cell Expression System

Why choose us?

- Glycogene has a prokaryotic and eukaryotic protein expression technology service platform for E. coli, Pichia pastoris, baculovirus vector - insect cells, mammalian cells, etc. In terms of recombinant protein expression and purification, we have a strong R & D production team and advanced purification and detection equipment.
- Now using prokaryotic and eukaryotic expression system, we have got a variety of purification methods for hundreds of high quality recombinant proteins. Our proteins have been successfully used in many fields such as enzyme synthesis, vaccine research and development, antibody drug development, immune detection, diagnostic reagent development and so on.

Service advantage

- Strict quality control system, short delivery cycle.
- Rich experience in inclusion body proteins, secretory proteins and transmembrane proteins.
- Has a variety of specifications of fermentation equipment: from 5 L to 500 L, satisfing the customer with different fermentation volume.
- Has GMP-like production workshop.
- Can provide the downstream process for enlarging service.
- Can provide one-stop technology services from genetic optimization synthesis, protein expression, fermentation and purification to quality control, saving the customer's valuable time and cost.
- Has GMP-like production workshop.

E.coli Expression System

- Clear genetic background, high expression level of target genes, short culture cycle and strong anticontamination ability.
- Soluble proteins, inclusion body proteins, fusion proteins, etc.
- His, GST, MBP and other tagged fusion protein.
- Detailed expression purification conditions, and experimental data by SDS-PAGE, Western Blot detection.
- Eight days fastest delivery.

Services Available	Lead Time	Deliverables
Gene synthesis and expression vector construction	5-8 working days (800-1000 bp), sequences larger than 1kb depending on the time of gene synthesis	Gene sequencing report
Protein expression, purification and detection	3-7 working days	Recombinant plasmid, 1mg purified protein and technical service report provided for each project.

Yeast Expression System

- Obvious advantages in processing, exocrine and post-translational modification of expression products.
- Economic efficiency, suitable for industrial amplification.
- 5-6 weeks delivery cycle.

Services Available	Process	Deliverables	Lead Time
Gene cloning	Gene synthesis and expression vector construction	Gene synthesis and sequencing report	2 weeks
Screening of yeast expression strains	Plasmid extraction and linearization	Nucleic acid electrophoresis images, Western Blot test results	2-3 weeks
	Electrical conversion to a suitable yeast host		
	Positive strain screening		
Protein expression, purification and detection	Protein expression, purification and SDS-PAGE detection	Recombinant plasmid, 1mg purified protein and technical service report provided for each project.	1 week

Insect Baculovirus Expression System

- Efficient expression ability.
- Safe and easy to operate.
- Able to accommodate large exogenous genes.
- Complete modification after translation system to contain higher activity.
- 6 to 7 weeks delivery cycle.

Services Available	Process	Deliverables	Lead Time
Gene cloning	Gene synthesis and expression vector construction	Gene synthesis and sequencing report	2 weeks
High titer venom acquisition	1.Transfect recombinant Bacmid DNA into insect cells to obtain baculovirus. 2.A high titer virus reservoir was obtained.	Western Blot test results	2 weeks
Protein expression, purification and detection	1.The high titer viral reservoir re-infects the insect cells. 2.The expression products were detected by SDS-PAGE and Western Blot. 3.Protein purification and SDS-PAGE detection.	Recombinant plasmid, high titer venom, 100 μg purified protein and technical service report provided for each project.	1 week

Mammalian Cell Expression System

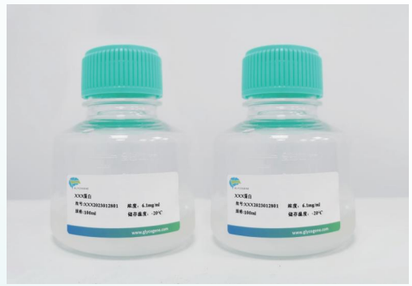
- The molecular structure, physicochemical properties and biological functions of the expressed products were closest to those of natural protein molecules.
- Mammalian cells in suspension culture are cultured in serum free medium to high density.
- To the correct guidance of protein folding, with complex of N-glycosylation and O-glycosylation modification after translation.
- 4-5 weeks fastest delivery.

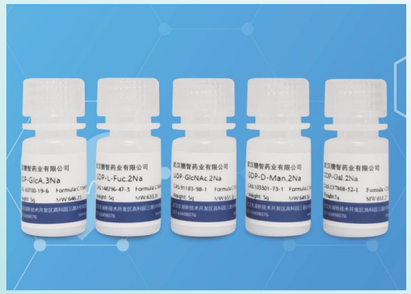
Services Available	Process	Deliverables	Lead Time
Gene cloning	Gene synthesis and expression vector construction	Gene synthesis and sequencing report	2 weeks
Transient transfect Mammalian cells; protein expression, purification and detection	1. Transient transfect HEK293, CHO and other cells; 2. The expression products were detected by SDS-PAGE and Western Blot; 3.Protein purification and SDS-PAGE detection.	Recombinant plasmid, 100 μg purified protein and technical service report provided for each project.	2-3 weeks
Cell stable transfection; protein expression, purification and detection	1.Transient transfect CHO and other cells; 2.Establish stable expression cell lines; 3.Protein purification and SDS-PAGE detection.	Recombinant plasmid, Stable expression of cell lines, 100 μg purified protein and technical service report provided for each project.	3-5 months

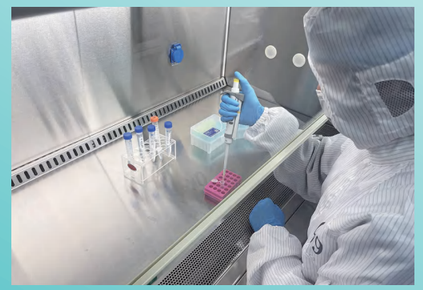
Large-scale protein preparation

- GLYCOGENE has mature protein fermentation and expression technology and protein purification technology, with 5L, 15L, 50L, 100L and 500L fermenters, which can meet different production requirements.
- High density fermentation of recombinant strains includes prokaryotic expression system and yeast expression system.
- GLYCOGENE can also achieve large-scale protein purification, including affinity chromatography, ion exchange, molecular sieve and hydrophobic chromatography, with a complete AKTA purification system, efficient control of the purification process.
- With perfect quality system, it can realize the production of GMP grade protein.

Services	Prokaryotic recombinant expression system	Yeast expression system
High density fermentation technology services	5L, 100L, 500L various fermentation scale, yield up to 150g bacteria mud /L	5L, 15L, 100L, 500L and other fermentation scale, secretion or intracellular expression
Large scale protein purification service	1. The purified recombinant proteins are provided; 2. The purified proteins are at the grade of 100 grams.	Provide recombinant protein (purity ≥95%) and partially purified recombinant protein (purity ≥70%).
Full set of CDMO technical services from seed establishment to pilot scale-up	1. Seed bank construction under GMP conditions; 2. Test technology research and development, pilot amplification process optimization; 3. Protein production under the condition of GMP; 4. Methodology development and validation.	1. Screening of engineering strains of yeast and optimization of fermentation conditions; 2. Seed bank construction; 3. The pilot production and magnified; 4. Methodology development and validation.







Monosaccharide

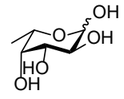
GD-0001 L-fucose

M.F.: $C_6H_{12}O_5$

M.W.: 164.16

CAS No.: 6696-41-9 / 2438-80-4

Package: mg to kg



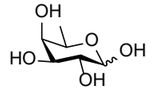
GD-0002 D-fucose

M.F.: $C_6H_{12}O_5$

M.W.: 164.16

CAS No.: 3615-37-0

Package: mg to kg



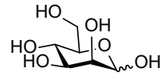
GD-0003 D-mannose

M.F.: $C_6H_{12}O_6$

M.W.: 180.16

CAS No.: 3458-28-4

Package: mg to kg



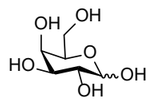
GD-0004 D-galactose

M.F.: $C_6H_{12}O_6$

M.W.: 180.16

CAS No.: 59-23-4

Package: mg to kg



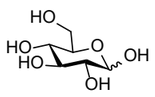
GD-0005 D-glucose

M.F.: $C_6H_{12}O_6$

M.W.: 180.16

CAS No.: 50-99-7

Package: mg to kg



Monosaccharide

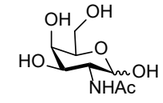
GD-0006 GalNAc

M.F.: $C_8H_{15}NO_6$

M.W.: 221.21

CAS No.: 1811-31-0

Package: mg to kg



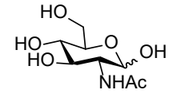
GD-0007 GlcNAc

M.F.: $C_8H_{15}NO_6$

M.W.: 221.21

CAS No.: 10036-64-3 / 7512-17-6

Package: mg to kg



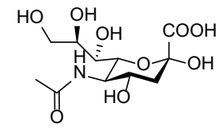
GD-0008 Neu5Ac

M.F.: $C_{11}H_{19}NO_9$

M.W.: 309.27

CAS No.: 131-48-6

Package: mg to kg



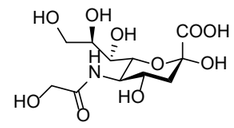
GD-0009 Neu5Gc

M.F.: $C_{11}H_{19}NO_{10}$

M.W.: 325.27

CAS No.: 1113-83-3

Package: mg to kg



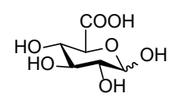
GD-0010 D-GlcA

M.F.: $C_6H_{10}O_7$

M.W.: 194.14

CAS No.: 6556-12-3

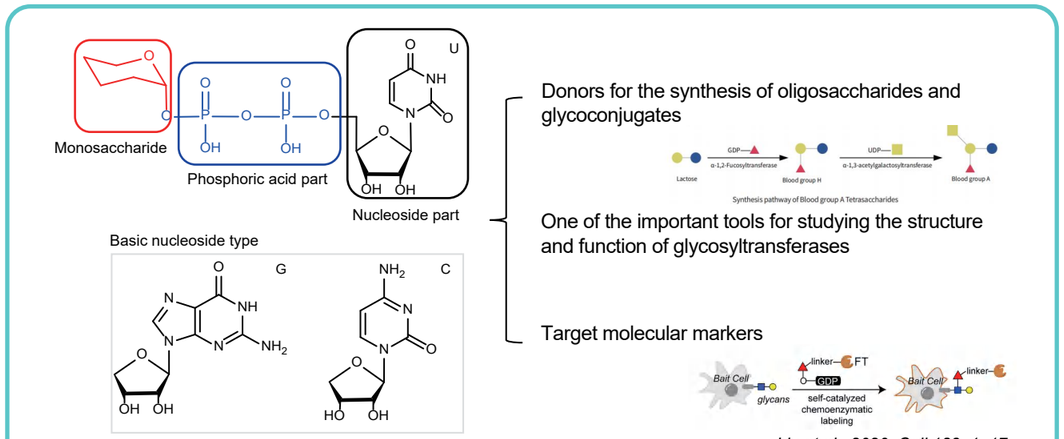
Package: mg to kg



Sugar nucleotide

Background Introduction

Sugar nucleotides, also known as sugar nucleoside diphosphate or nucleoside monophosphate, are derivatives formed by reacting different monosaccharide with hydroxyl groups. Its structure is composed of three parts (i.e., sugar, phosphate and nucleoside). Sugar nucleotides are activated forms during the synthesis of glycans, such as UDP-Gal, GDP-Fuc and CMP-Sia.



Liu et al., 2020, Cell 183, 1–17

Application

Antibiotic metabolism pathways

Antibiotics have important applications in the fields of biomedicine and pharmacy. Many antibiotics have one or more sugar groups, which play an important role in their biological activity. Therefore, antibiotic glycosylation is one of the main research area in antibiotic metabolism.

Most of the sugar groups in natural products are synthesized from D-glucose 1-phosphate which act as the starting material. The compound is utilized to synthesize NDP-glucose, and then catalyzed by a series of enzymes to obtain the target NDP-sugar, which is finally transferred to the antibiotic backbone by diverse glycosyltransferases. Throughout the process, the enzyme substrates are sugar nucleotide. In summary, sugar nucleotides play a significant role in antibiotic metabolism.

Biochemical property study of glycosyltransferases

Sugar nucleotides, the natural substrates of glycosyltransferases, are one of the important tools for studying the structure and function of glycosyltransferases. Traditionally, the catalytic activity of glycosyltransferases is only considered to transfer the activated sugar donor to acceptor substrates. However, it was found that glycosyltransferase can hydrolyse the sugar moiety on the antibiotics in the presence of corresponding nucleotides (i.e., reverse reaction). Moreover, some glycosyltransferases have relaxed substrate specificity and can catalyze the transfer of various sugar nucleotides to the antibiotic backbone. Based on the above two points, the replacement reaction between sugar and antibiotic backbone has been successfully discovered, thus providing a strategy for replacing antibiotics with new sugar groups and exchanging the existing sugar groups among various antibiotics.

Biological mechanism study

The application of click chemistry in glycobiology is becoming more and more important. This kind of method is mainly to modify biochemical molecules by modified sugars, and then label the target molecules in situ by click chemistry, so as to conduct mechanism study[*]. Sugar nucleotides play an increasingly important role in chemical glycobiology as natural substrates for a variety of enzymes.

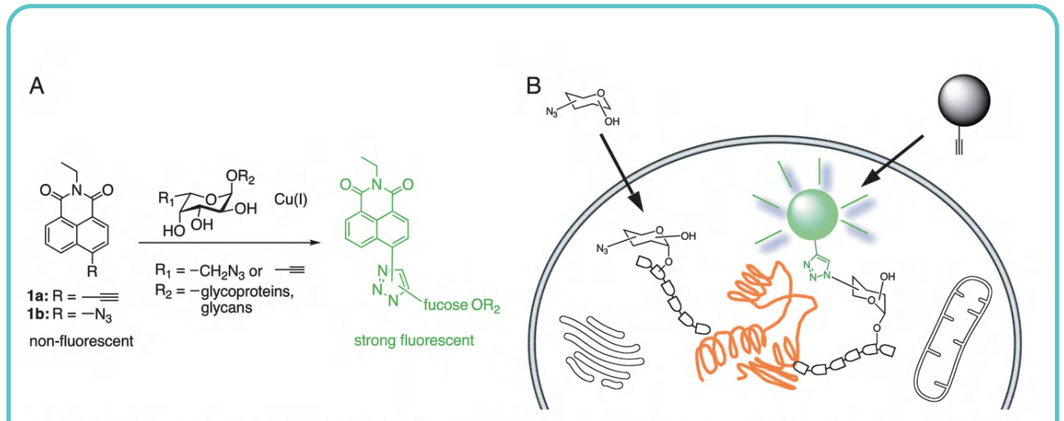


Fig. 1. General strategy for glycan labeling. (*A*) Probe structures based on 1,8-naphthalimide include an azide or alkyne at a position of the ring that will allow a fluorogenic ligation with 6-modified fucose analogs. The fluorescence adduct is generated when probes are reacted with the azido/alkynyl group of fucosides via Cu(I)-catalyzed [3 + 2] cycloaddition. (*B*) Strategy for specific fluorescent labeling of fucosylated glycans in cells. Covalent modification of the target glycan with probes **1a** or **1b** results in production of fluorescently labeled glycoproteins bearing modified fucose (azidofucose shown).

Reference:

[*] Sawa M, et al. Proceedings of the National Academy of Sciences, 2006, 103(33):12371-12376.

[*] Marchesan S, et al. Chemical Communications, 2008, 36(36):4321-4323.

Sugar nucleotide

SN-1001 CMP-Neu5Ac.2Na

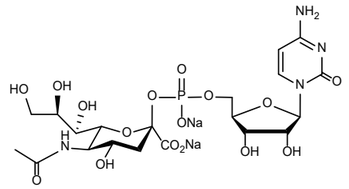
Purity: 85%

M.F.: $C_{20}H_{29}N_4Na_2O_{16}P$

M.W.: 658.42

CAS No.: 3063-71-6

Package: 50 mg, 100 mg, 200 mg, 500 mg, 1 g



SN-1002 CMP-Neu5Gc.2Na

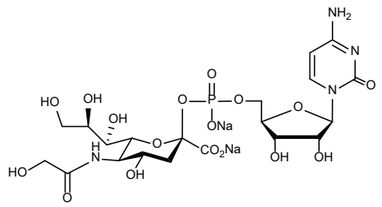
Purity: 90%

M.F.: $C_{20}H_{29}N_4Na_2O_{17}P$

M.W.: 674.42

CAS No.: 98300-80-2

Package: 50 mg, 100 mg, 200 mg, 500 mg, 1 g



SN-1003 UDP-Glc.2Na

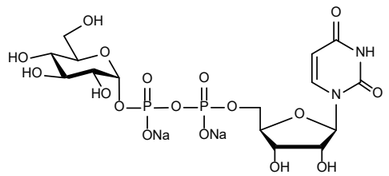
Purity: 98%

M.F.: $C_{15}H_{22}N_2Na_2O_{17}P_2$

M.W.: 610.27

CAS No.: 117756-22-6

Package: mg to kg



SN-1004 UDP-Gal.2Na

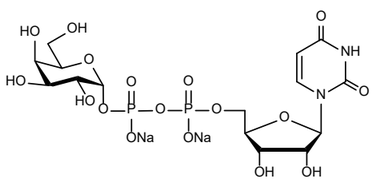
Purity: 98%

M.F.: $C_{15}H_{22}N_2Na_2O_{17}P_2$

M.W.: 610.27

CAS No.: 137868-52-1

Package: mg to kg



Sugar nucleotide

SN-1005 UDP-GlcNAc.2Na

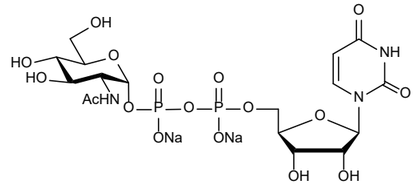
Purity: 98%

M.F.: $C_{17}H_{25}N_3Na_2O_{17}P_2$

M.W.: 651.32

CAS No.: 91183-98-1

Package: mg to kg



SN-1006 UDP-GalNAc.2Na

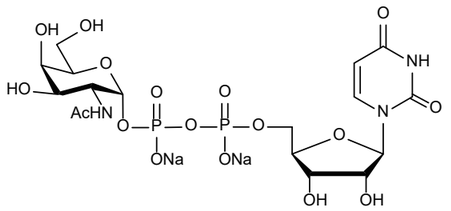
Purity: 98%

M.F.: $C_{17}H_{25}N_3Na_2O_{17}P_2$

M.W.: 651.32

CAS No.: 108320-87-2

Package: mg to kg



SN-1007 UDP-GlcA.3Na

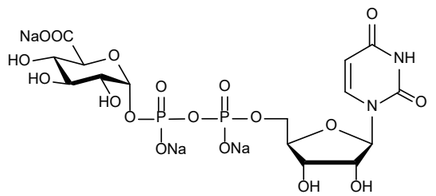
Purity: 98%

M.F.: $C_{15}H_{19}N_2Na_3O_{18}P_2$

M.W.: 646.23

CAS No.: 67300-19-6

Package: mg to kg



SN-1008 UDP-GalA.3Na

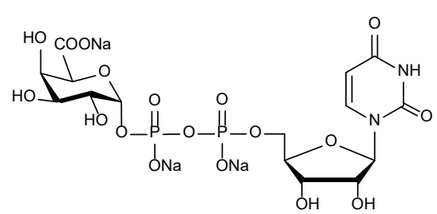
Purity: 98%

M.F.: $C_{15}H_{19}N_2Na_3O_{18}P_2$

M.W.: 646.23

CAS No.: 148407-07-2

Package: mg to kg



GLYCOGENE

Sugar nucleotide

SN-1009 GDP-L-Fuc.2Na

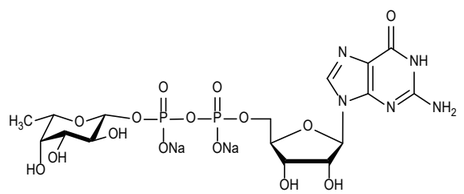
Purity: 98%

M.F.: $C_{16}H_{23}N_5Na_2O_{15}P_2$

M.W.: 633.31

CAS No.: 15839-70-0

Package: mg to kg



SN-1010 GDP-D-Man.2Na

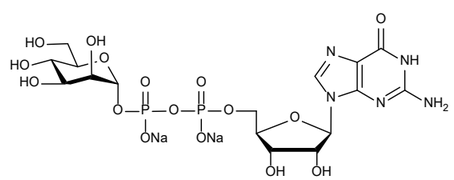
Purity: 98%

M.F.: $C_{16}H_{23}N_5Na_2O_{16}P_2$

M.W.: 649.31

CAS No.: 103301-73-1

Package: mg to kg



SN-1011 UDP-Xyl.2Na

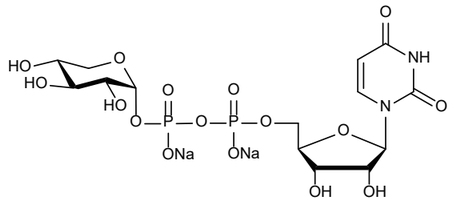
Purity: 98%

M.F.: $C_{14}H_{21}N_2NaO_{16}P_2$

M.W.: 558.26

CAS No.: 108320-89-4

Package: mg to kg



SN-1012 UDP-β-L-Rhamnose

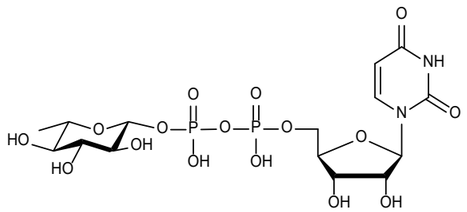
Purity: 98%

M.F.: $C_{15}H_{24}N_2O_{16}P_2$

M.W.: 550.30

CAS No.: 1955-26-6

Package: mg to kg



Sugar nucleotide

SN-1013 UDP-β-L-Ara.2Na

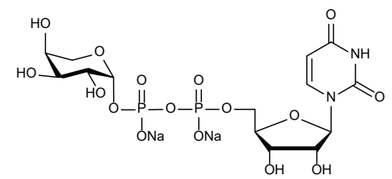
Purity: 95%

M.F.: $C_{14}H_{20}N_2Na_2O_{16}P_2$

M.W.: 580.24

CAS No.: 15839-78-8

Package: 10 mg, 20 mg, 50 mg, 1 g



SN-1014 GDP-6-deoxy-β-d-talose.2Na

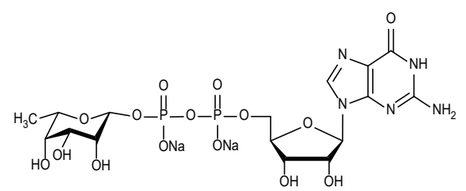
Purity: 98%

M.F.: $C_{16}H_{23}N_5Na_2O_{15}P_2$

M.W.: 633.31

CAS No.: N/A

Package: 100 mg, 200 mg, 500 mg, 1 g



SN-1015 UDP-GlcNAz.2Na

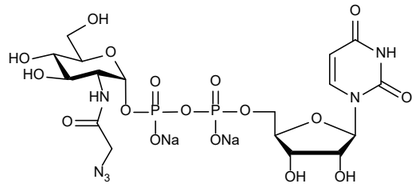
Purity: 98%

M.F.: $C_{17}H_{24}N_6Na_2O_{17}P_2$

M.W.: 692.33

CAS No.: 1611490-64-2

Package: mg to kg



SN-1016 UDP-GalNAz.2Na

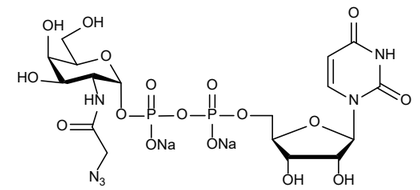
Purity: 98%

M.F.: $C_{17}H_{24}N_6Na_2O_{17}P_2$

M.W.: 692.33

CAS No.: 653600-61-4

Package: mg to kg



Sugar nucleotide

SN-1017 UDP-6-azido-6-deoxy-D-Glc.2Na

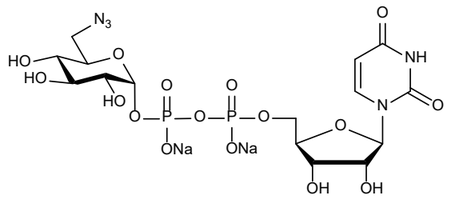
Purity: 95%; 98%

M.F.: $C_{15}H_{21}N_5Na_2O_{16}P_2$

M.W.: 635.28

CAS No.: 537039-67-1

Package: 10 mg, 50 mg, 100 mg, 200 mg, 500 mg, 1 g



SN-1018 UDP-6-azido-6-deoxy-D-Gal.2Na

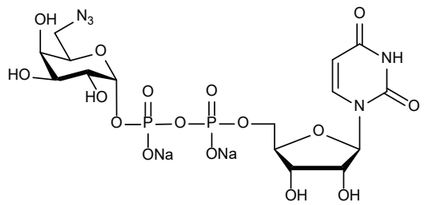
Purity: 95%; 98%

M.F.: $C_{15}H_{21}N_5Na_2O_{16}P_2$

M.W.: 635.28

CAS No.: 868208-96-2

Package: 10 mg, 50 mg, 100 mg, 200 mg, 500 mg, 1 g



SN-1019 UDP-GlcNTFA.2Na

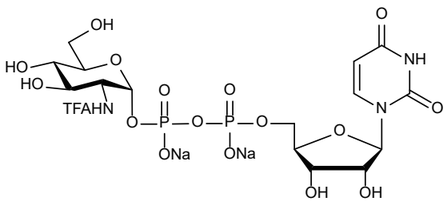
Purity: 95%; 98%

M.F.: $C_{17}H_{22}F_3N_3Na_2O_{17}P_2$

M.W.: 705.02

CAS No.: 1355005-47-8

Package: mg to kg



SN-1020 UDP-GalNTFA.2Na

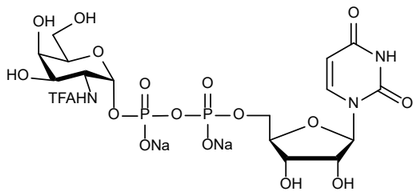
Purity: 95%; 98%

M.F.: $C_{17}H_{22}F_3N_3Na_2O_{17}P_2$

M.W.: 705.29

CAS No.: N/A

Package: mg to kg



Sugar nucleotide

SN-1021 UDP-2-deoxy-Glucose.2Na

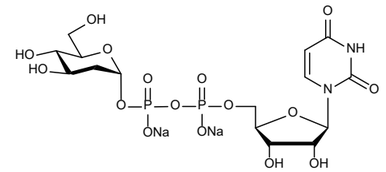
Purity: 95%; 98%

M.F.: $C_{15}H_{22}N_2Na_2O_{16}P_2$

M.W.: 594.27

CAS No.: N/A

Package: 10 mg, 50 mg, 100 mg, 200 mg, 500 mg, 1 g



SN-1022 UDP-2-F-Glc.2Na

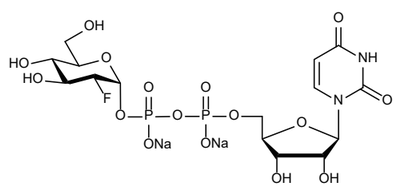
Purity: 95%; 98%

M.F.: $C_{15}H_{21}FN_2Na_2O_{16}P_2$

M.W.: 612.26

CAS No.: N/A

Package: 10 mg, 20 mg, 50 mg, 100 mg



SN-1023 GDP-6-N3-Fuc.2Na

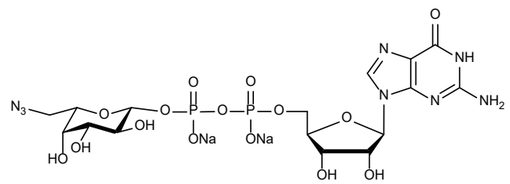
Purity: 98%

M.F.: $C_{16}H_{22}N_8Na_2O_{15}P_2$

M.W.: 674.32

CAS No.: N/A

Package: mg to kg



SN-1024 GDP-6-Al-Fuc.2Na

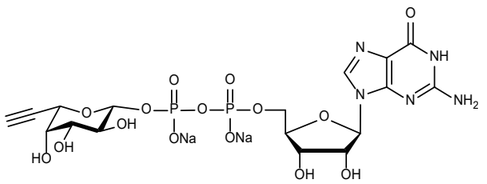
Purity: 98%

M.F.: $C_{17}H_{21}N_5Na_2O_{15}P_2$

M.W.: 643.30

CAS No.: N/A

Package: mg to kg



Sugar nucleotide

SN-1025 ADP-D-Glucose

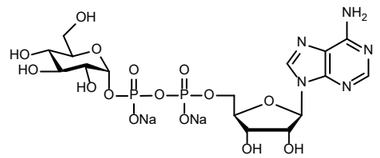
Purity: 95%; 98%

M.F.: $C_{16}H_{25}N_5O_{15}P_2$

M.W.: 589.34

CAS No.: N/A

Package: 10 mg, 50 mg, 100 mg, 200 mg, 500 mg, 1 g



SN-1026 ADP-D-Man

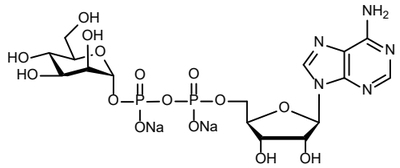
Purity: 95%; 98%

M.F.: $C_{16}H_{25}N_5O_{15}P_2$

M.W.: 589.34

CAS No.: N/A

Package: 10 mg, 50 mg, 100 mg, 200 mg, 500 mg, 1 g



SN-1027 dTDP-a-D-Glucose

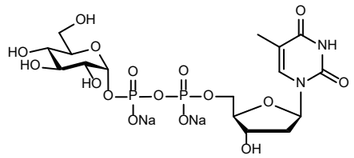
Purity: 95%; 98%

M.F.: $C_{16}H_{26}N_2O_{16}P_2$

M.W.: 564.33

CAS No.: 2196-62-5

Package: 10 mg, 50 mg, 100 mg, 200 mg, 500 mg, 1 g



Oligosaccharides

Background Introduction

Oligosaccharides are usually carbohydrates composed of 2 to 10 sugar units linked by glycosidic bonds. The most common oligosaccharides are disaccharides, which are formed by combining two monosaccharides through glycosidic bonds.

Application area

There are a few naturally occurring oligosaccharides, and most oligosaccharides are obtained by chemical or enzymatic hydrolysis of polysaccharides. The research and application of functional oligosaccharides (e.g. human milk oligosaccharides) in the field of public health are becoming more and more popular.

Many oligosaccharides form specific antigens with proteins and lipids in living organism, participate in various biological processes, and play important functions. Nearly 200 different kinds of biologically active oligosaccharides are involved in tumor immune pathways (cell adhesion, immune recognition, embryogenesis, tumorigenesis and infection, etc.). This family includes a large number of biologically active oligosaccharides, such as human blood group antigen (ABH, Lewis, P) and carbohydrate moieties of major glycolipids (gangliosides, globulines), etc..

Glycogene has multiple platforms containing chemistry, enzyme, and synthetic biology, and has extensive experience in the synthesis and separation of functional oligosaccharides, providing sugar products from milligrams to kilograms.

Reference:
P. Kosma. Anticarbohydrate Antibodies(9).
M. Speir1, et al. Scientific Reports, 2017, 7(1):14273.

Miscellaneous glycans

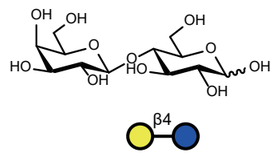
GO-0001 Galb1, 4Glc

M.F.: $C_{12}H_{22}O_{11}$

M.W.: 342.30

CAS No.: 63-42-3

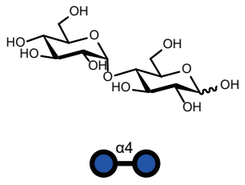
Package: g to kg



Miscellaneous glycans

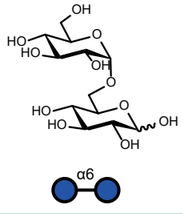
GO-0002 Glcb1, 4Glc

M.F.: $C_{12}H_{24}O_{12}$
M.W.: 360.31
CAS No.: 6363-53-7
Package: g to kg



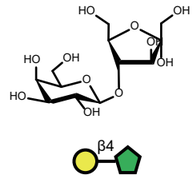
GO-0003 Glcb1, 6Glc

M.F.: $C_{12}H_{22}O_{11}$
M.W.: 342.30
CAS No.: 499-40-1
Package: g to kg



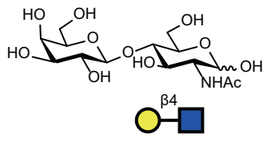
GO-0004 Galb1, 4Fru

M.F.: $C_{12}H_{22}O_{11}$
M.W.: 342.30
CAS No.: 4618-18-2
Package: g to kg



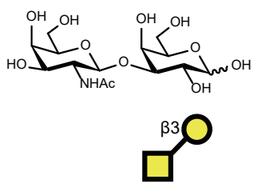
GO-0005 Galb1, 4GlcNAc

M.F.: $C_{14}H_{25}NO_{11}$
M.W.: 383.35
CAS No.: 32181-59-2
Package: mg to kg



GO-0006 GalNAcb1, 3Gal

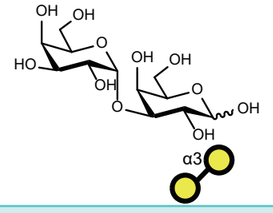
M.F.: $C_{14}H_{25}NO_{11}$
M.W.: 383.35
CAS No.: N/A
Package: mg to g



Miscellaneous glycans

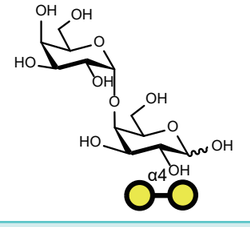
GO-0007 Gala1, 3Gal

M.F.: $C_{12}H_{22}O_{11}$
M.W.: 342.30
CAS No.: 13168-24-6
Package: mg to g



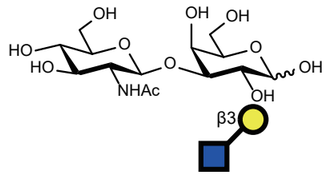
GO-0008 Gala1, 4Gal

M.F.: $C_{12}H_{22}O_{11}$
M.W.: 342.30
CAS No.: 80446-85-1
Package: mg to g



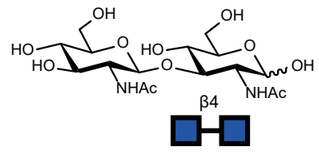
GO-0009 GlcNAcb1, 3Gal

M.F.: $C_{14}H_{25}NO_{11}$
M.W.: 383.35
CAS No.: N/A
Package: mg to g



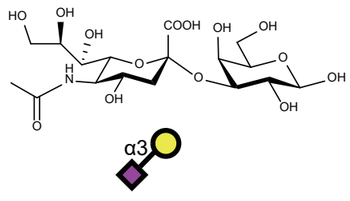
GO-0010 GlcNAcb1, 4GlcNAc

M.F.: $C_{16}H_{28}N_2O_{11}$
M.W.: 424.40
CAS No.: 35061-50-8
Package: mg to g



GO-0011 Neu5Aca2, 3Gal

M.F.: $C_{17}H_{29}NO_{14}$
M.W.: 471.41
CAS No.: N/A
Package: mg to g



Miscellaneous glycans

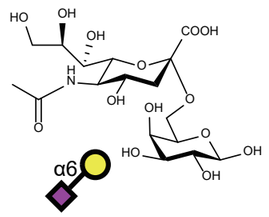
GO-0012 Neu5Aca2, 6Gal

M.F.: $C_{17}H_{29}NO_{14}$

M.W.: 471.41

CAS No.: N/A

Package: mg to g



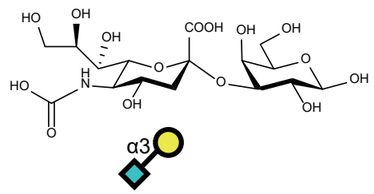
GO-0013 Neu5Gca2, 3Gal

M.F.: $C_{16}H_{27}NO_{15}$

M.W.: 473.38

CAS No.: 499-40-1

Package: mg to g



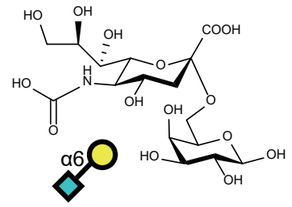
GO-0014 Neu5Gca2, 6Gal

M.F.: $C_{16}H_{27}NO_{15}$

M.W.: 473.38

CAS NO.: N/A

Package: mg to g



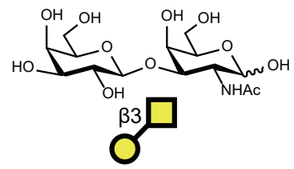
GO-0015 GalNAca1, 3Gal

M.F.: $C_{14}H_{25}NO_{11}$

M.W.: 383.35

CAS No.: 20972-29-6

Package: mg to g



Malt oligosaccharides

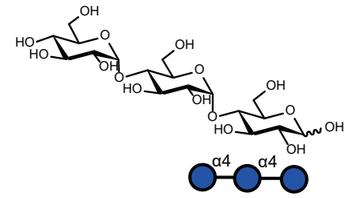
GO-0101 Maltotriose (Glca1, 4Glca1, 4Glc)

M.F.: $C_{18}H_{32}O_{16}$

M.W.: 504.44

CAS No.: 1109-28-0

Package: g to kg



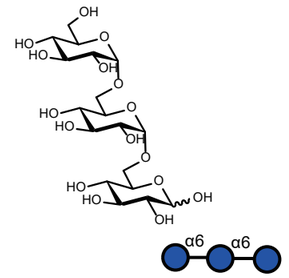
GO-0102 Isomaltotriose (Glca1, 6Glca1, 6Glc)

M.F.: $C_{18}H_{32}O_{16}$

M.W.: 504.44

CAS No.: 3371-50-4

Package: mg to g



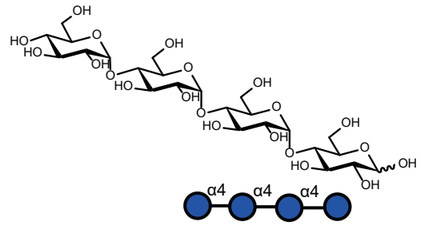
GO-0103 Maltotetraose ((Glca1, 4)$_3$Glc)

M.F.: $C_{24}H_{42}O_{21}$

M.W.: 666.58

CAS No.: 34612-38-9

Package: mg to g



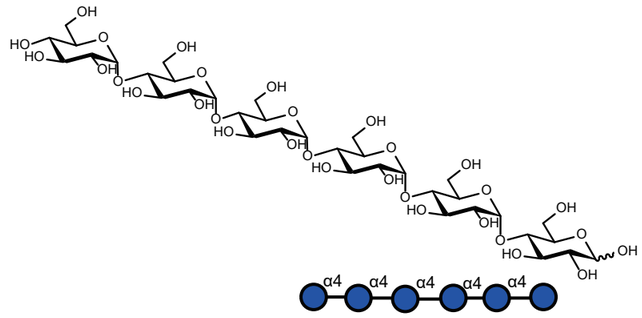
GO-0104 Maltohexaose ((Glca1, 4)$_5$Glc)

M.F.: $C_{36}H_{62}NO_{31}$

M.W.: 990.86

CAS No.: 34620-77-4

Package: g to kg



Malt oligosaccharides

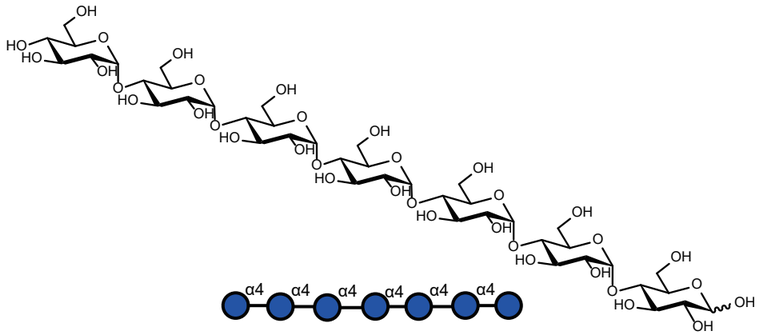
GO-0105 Maltoheptaose ((Glca1, 4)$_6$Glc)

M.F.: $C_{42}H_{72}O_{36}$

M.W.: 1153.00

CAS No.: 34620-78-5

Package: g to kg



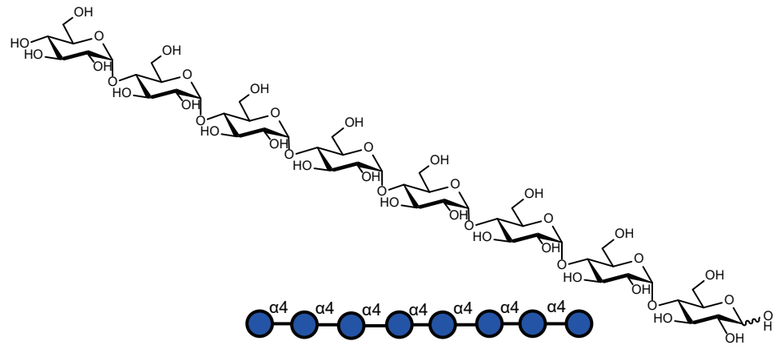
GO-0106 Maltooctaose ((Glca1, 4)$_7$Glc)

M.F.: $C_{48}H_{82}O_{41}$

M.W.: 1315.14

CAS No.: 6156-84-9

Package: g to kg



Human milk oligosaccharides

There are more than 200 different human milk oligosaccharides, and more than 30 have been determined structurally. Each human milk oligosaccharide has unique function. It is beneficial to the development of the neonatal brain, acting as a prebiotic, supporting the development of the immune system and the intestinal tract, preventing pathogens from adhering to the cell surface, acting as an epithelial cell response regulator, immune cell regulator, and triggering cell protection. Currently, 2'-FL, LNnT, DFL, LNT, 3'-SL, 6'-SL, etc have passed the new food or GRAS certification and can be used in formula milk powder, functional drinks, functional foods, nutritional supplements and special medical food.

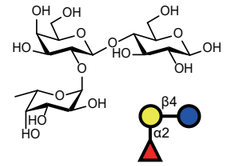
GO-2001 2'FL

M.F.: $C_{18}H_{32}O_{15}$

M.W.: 488.44

CAS No.: 41263-94-9

Package: g to kg



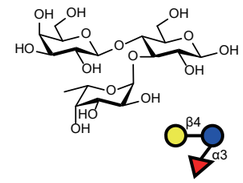
GO-2002 3'FL

M.F.: $C_{18}H_{32}O_{15}$

M.W.: 488.44

CAS No.: 41312-47-4

Package: g to kg



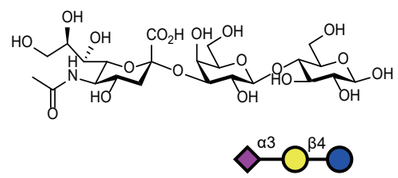
GO-2003 3'SL (GM3)

M.F.: $C_{23}H_{39}NO_{19}$

M.W.: 633.55

CAS No.: 128596-80-5/35890-38-1

Package: g to kg



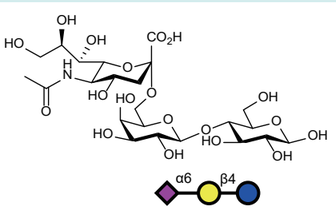
GO-2004 6'SL

M.F.: $C_{23}H_{39}NO_{19}$

M.W.: 633.55

CAS No.: 35890-39-2

Package: g to kg



Human milk oligosaccharides

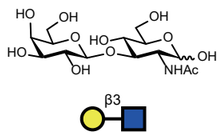
GO-2005 LNB

M.F.: $C_{14}H_{25}NO_{11}$

M.W.: 383.35

CAS No.: 50787-09-2

Package: mg to kg



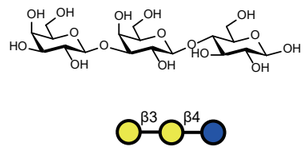
GO-2006 3'GL

M.F.: $C_{18}H_{32}O_{16}$

M.W.: 504.44

CAS No.: 32694-82-9

Package: mg to kg



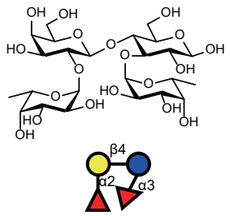
GO-2007 DFL

M.F.: $C_{24}H_{42}O_{19}$

M.W.: 634.58

CAS No.: 20768-11-0

Package: mg to kg



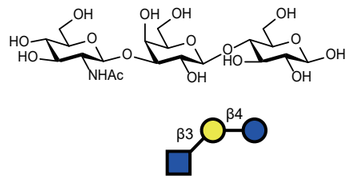
GO-2008 LNT II

M.F.: $C_{20}H_{35}NO_{16}$

M.W.: 545.49

CAS No.: 75645-27-1

Package: mg to kg



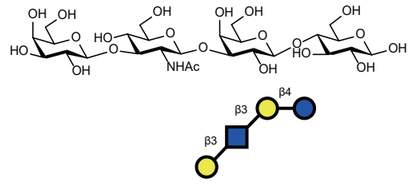
GO-2009 LNT

M.F.: $C_{26}H_{46}NO_{21}$

M.W.: 707.63

CAS No.: 14116-68-8

Package: mg to kg



Human milk oligosaccharides

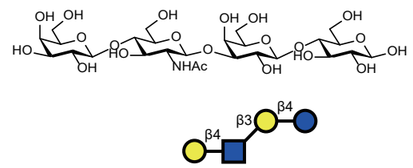
GO-2010 LNnT

M.F.: $C_{26}H_{45}NO_{21}$

M.W.: 707.63

CAS No.: 13007-32-4

Package: mg to kg



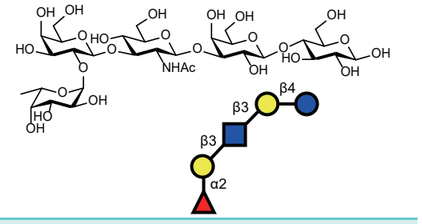
GO-2011 LNFP I

M.F.: $C_{32}H_{55}NO_{25}$

M.W.: 853.77

CAS No.: 7578-25-8

Package: mg to g



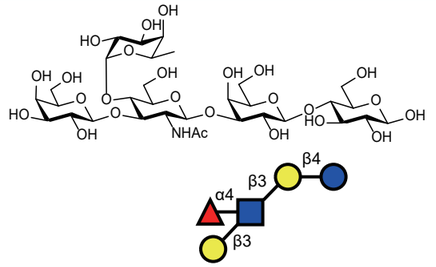
GO-2012 LNFP II

M.F.: $C_{32}H_{55}NO_{25}$

M.W.: 853.77

CAS No.: 21973-23-9

Package: mg to g



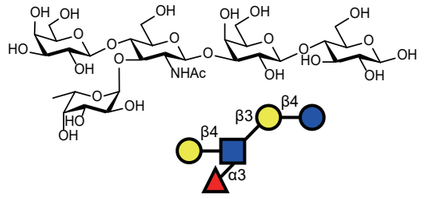
GO-2013 LNFP III

M.F.: $C_{32}H_{55}NO_{25}$

M.W.: 853.77

CAS No.: 25541-09-7

Package: mg to g



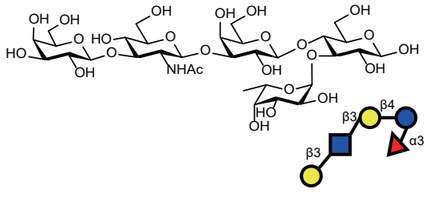
GO-2014 LNFP V

M.F.: $C_{32}H_{55}NO_{25}$

M.W.: 853.77

CAS No.: 60254-64-0

Package: mg to g



Human milk oligosaccharides

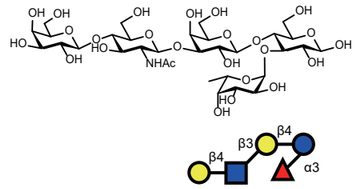
GO-2015 LNFP VI

M.F.: $C_{32}H_{55}NO_{25}$

M.W.: 853.77

CAS No.: 145876-86-4

Package: mg to g



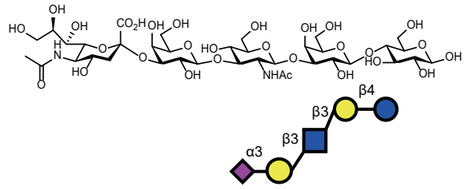
GO-2016 LSTa

M.F.: $C_{37}H_{62}N_2O_{29}$

M.W.: 998.89

CAS No.: 64003-53-8

Package: mg to g



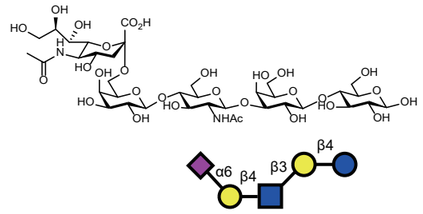
GO-2017 LSTc

M.F.: $C_{37}H_{62}N_2O_{29}$

M.W.: 998.89

CAS No.: 64003-55-0

Package: mg to g



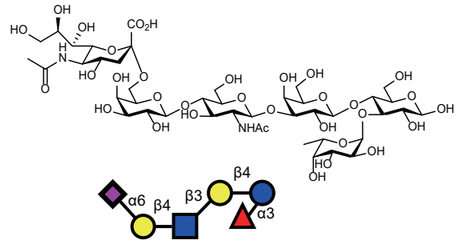
GO-2018 F-LSTc

M.F.: $C_{43}H_{72}N_2O_{33}$

M.W.: 1145.03

CAS No.: N/A

Package: mg to g



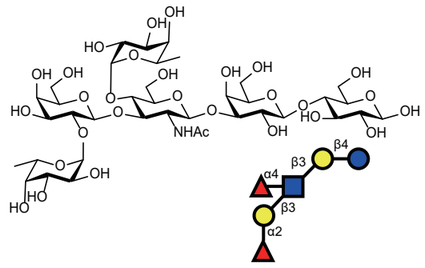
GO-2019 LNDFH I

M.F.: $C_{38}H_{65}NO_{29}$

M.W.: 999.92

CAS No.: 16789-38-1

Package: mg to g



Human milk oligosaccharides

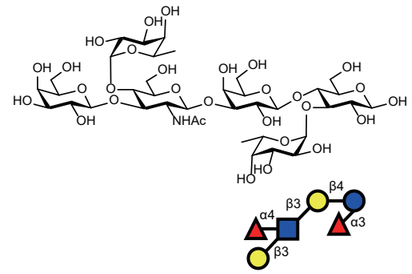
GO-2020 LNDFH II

M.F.: $C_{38}H_{65}NO_{29}$

M.W.: 999.92

CAS No.: 62258-12-2

Package: mg to g



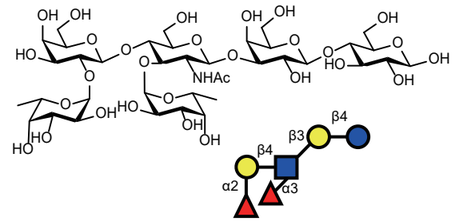
GO-2021 LNnDFH I

M.F.: $C_{38}H_{65}NO_{29}$

M.W.: 999.92

CAS No.: 62469-99-2

Package: mg to g



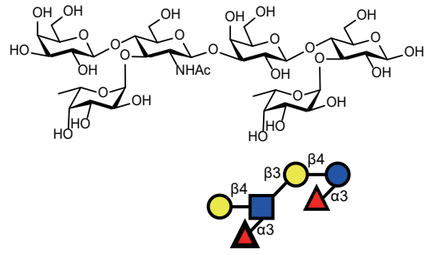
GO-2022 LNnDFH II

M.F.: $C_{38}H_{65}NO_{29}$

M.W.: 999.92

CAS No.: N/A

Package: mg to g



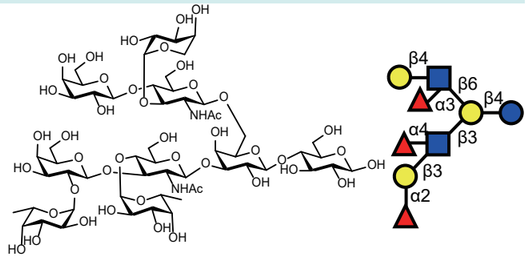
GO-2023 TF-LNH(TFLNH I)

M.F.: $C_{57}H_{96}N_2O_{43}$

M.W.: 1497.37

CAS No.: 11688-09-1

Package: mg to g



Human milk oligosaccharides

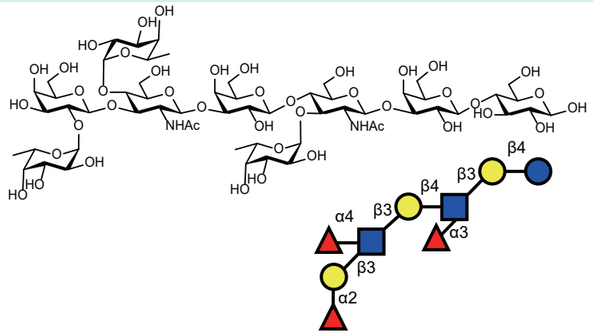
GO-2024 TF-pLNH I

M.F.: $C_{58}H_{98}N_2O_{43}$

M.W.: 1511.39

CAS No.: 120864-60-0

Package: mg to g



Other human milk oligosaccharides

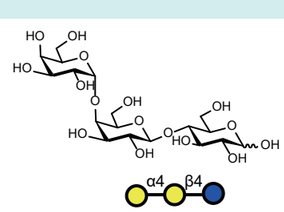
GO-3001 Gala1, 4Galb1, 4Glc

M.F.: $C_{18}H_{32}O_{16}$

M.W.: 504.44

CAS No.: N/A

Package: mg to hg



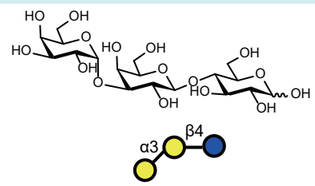
GO-3002 Gala1, 3Galb1, 4Glc

M.F.: $C_{18}H_{32}O_{16}$

M.W.: 504.44

CAS No.: N/A

Package: mg to hg



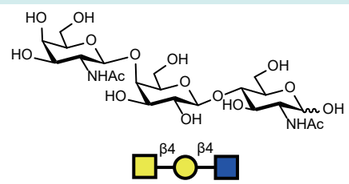
GO-3003 GalNAcb1, 4Galb1, 4GlcNAc

M.F.: $C_{22}H_{38}N_2O_{16}$

M.W.: 586.54

CAS No.: N/A

Package: mg to hg



Human milk oligosaccharides

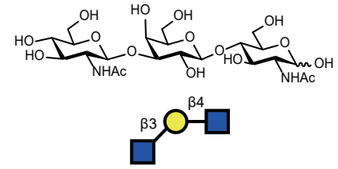
GO-3004 GlcNAcb1, 3Galb1, 4GlcNAc

M.F.: $C_{22}H_{38}N_2O_{16}$

M.W.: 586.54

CAS No.: N/A

Package: mg , g



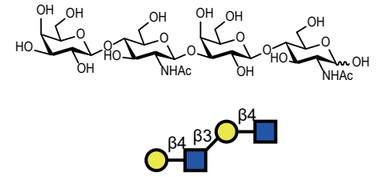
GO-3005 DiLacNAc(Galb1, 4GlcNAcb1, 3Galb1, 4GlcNAc)

M.F.: $C_{28}H_{48}N_2O_{21}$

M.W.: 748.69

CAS No.: N/A

Package: mg , g



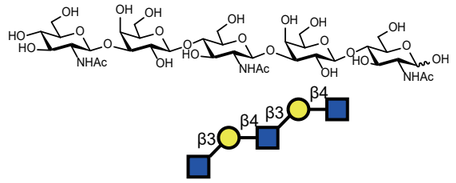
GO-3006 GlcNAcb1, 3Galb1, 4GlcNAcb1, 3Galb1, 4GlcNAc

M.F.: $C_{36}H_{61}N_3O_{26}$

M.W.: 951.88

CAS No.: N/A

Package: mg , g



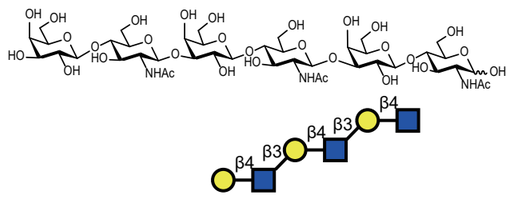
GO-3007 Galb1, 4GlcNAcb1, 3Galb1, 4GlcNAcb1, 3Galb1, 4GlcNAc

M.F.: $C_{42}H_{71}N_3O_{31}$

M.W.: 1114.02

CAS No.: N/A

Package: mg , g



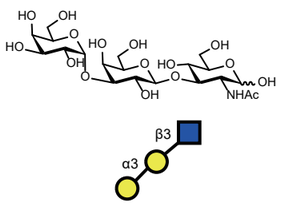
GO-3008 Gala1, 3Galb1, 3GlcNAc

M.F.: $C_{20}H_{35}NO_{16}$

M.W.: 545.49

CAS No.: N/A

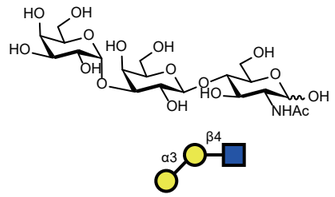
Package: mg , g



Other human milk oligosaccharides

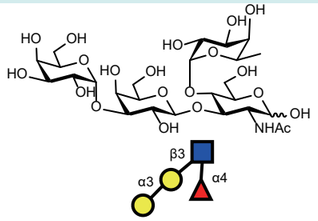
GO-3009 α-Gal Gala1,3Galb1,4GlcNAc

M.F.: $C_{20}H_{35}NO_{16}$
M.W.: 545.49
CAS No.: N/A
Package: mg , g



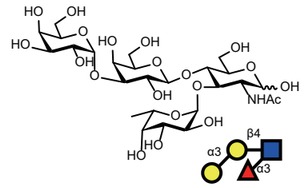
GO-3010 α-Gal LewisA
Gala1, 3Galb1, 3(Fuca1, 4)GlcNAc

M.F.: $C_{26}H_{45}NO_{20}$
M.W.: 691.63
CAS No.: N/A
Package: mg , g



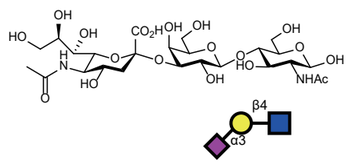
GO-3011 α-Gal LewisX Gala1,3Galb1,4(Fuca1,3)GlcNAc

M.F.: $C_{26}H_{45}NO_{20}$
M.W.: 691.63
CAS No.: N/A
Package: mg , g



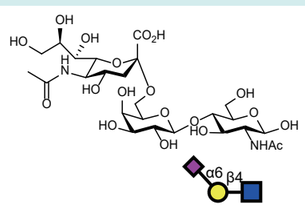
GO-3012 NeuAca2,3Galb1,4GlcNAc

M.F.: $C_{25}H_{42}N_2O_{19}$
M.W.: 674.61
CAS No.: N/A
Package: mg , g



GO-3013 NeuAca2, 6Galb1, 4GlcNAc

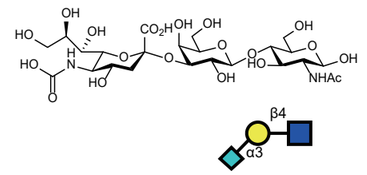
M.F.: $C_{25}H_{42}N_2O_{19}$
M.W.: 674.61
CAS No.: N/A
Package: mg , g



Other human milk oligosaccharides

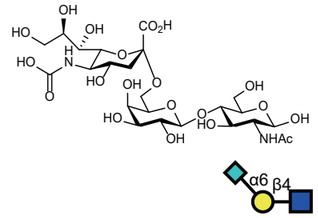
GO-3014 Neu5Gca2, 3Galb1, 4GlcNAc

M.F.: $C_{24}H_{40}N_2O_{20}$
M.W.: 676.58
CAS No.: N/A
Package: mg , g



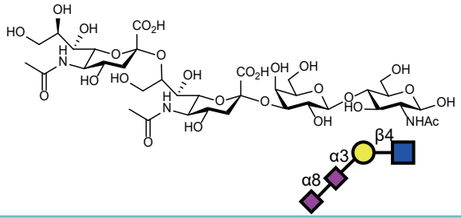
GO-3015 Neu5Gca2, 6Galb1, 4GlcNAc

M.F.: $C_{24}H_{40}N_2O_{20}$
M.W.: 676.58
CAS No.: N/A
Package: mg , g



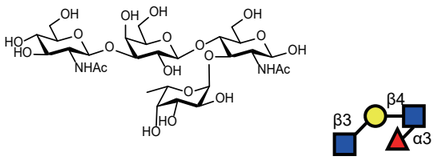
GO-3016 NeuAca2, 8NeuAca2, 3Galb1, 4GlcNAc

M.F.: $C_{36}H_{59}N_3O_{27}$
M.W.: 965.86
CAS No.: N/A
Package: mg , g



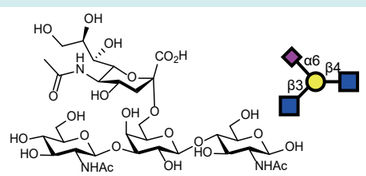
GO-3017 GlcNAcb1, 3Galb1, 4(Fuca1, 3)GlcNAc

M.F.: $C_{28}H_{48}N_2O_{20}$
M.W.: 732.69
CAS No.: N/A
Package: mg , g



GO-3018 GlcNAcb1, 3(Neu5Aca2, 6)Galb1, 4GlcNAc

M.F.: $C_{33}H_{55}N_3O_{24}$
M.W.: 877.80
CAS No.: N/A
Package: mg , g



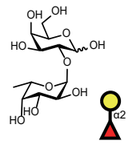
Blood type oligosaccharides

Many oligosaccharides linked to proteins and lipids in cell participate in many different biological processes. Various complex sugar chains with terminal Lewis epitopes can be covalently linked with proteins and lipids to form glycoconjugates or solely exist as free glycans. Those free glycans and glycoconjugates mediate the interaction between cells and the extracellular environment, which plays a vital role in many physiological and pathological processes, and has broad application in biomedicine. For example, Lex, sLex, Ley, and sLea are common tumor-associated carbohydrate antigens (TACAs), which have been used as biomarkers for clinical diagnosis of tumors and targets for immunotherapy. Furthermore, the Pk antigen is a receptor of Shiga toxin and E. coli-associated hemolytic uremic syndrome (HUS), as well as a receptor of *Streptococcus* suis.

Blood group antigen (ABH)

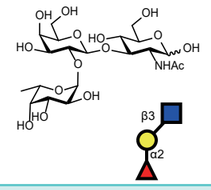
GO-4001 Blood type disaccharide H

M.F.: $C_{12}H_{22}O_{10}$
M.W.: 326.30
CAS No.: 16741-18-7
Package: mg , g



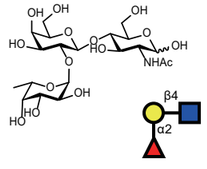
GO-4002 Blood type trisaccharide H Type I

M.F.: $C_{20}H_{35}NO_{15}$
M.W.: 529.49
CAS No.: N/A
Package: mg , g



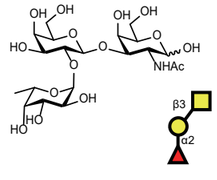
GO-4003 Blood type trisaccharide H Type II

M.F.: $C_{20}H_{35}NO_{15}$
M.W.: 529.49
CAS No.: N/A
Package: mg , g



GO-4004 Blood type trisaccharide H Type III/IV

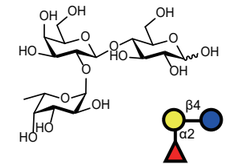
M.F.: $C_{20}H_{35}NO_{15}$
M.W.: 529.49
CAS No.: N/A
Package: mg , g



Blood group antigen (ABH)

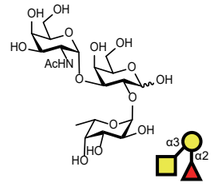
GO-4005 Blood type trisaccharide H Type VI (2'FL)

M.F.: $C_{18}H_{32}O_{15}$
M.W.: 488.44
CAS No.: N/A
Package: mg , g



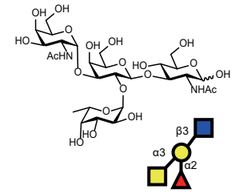
GO-4006 Blood type trisaccharide A

M.F.: $C_{20}H_{35}NO_{15}$
M.W.: 529.49
CAS No.: 49777-13-1
Package: mg , g



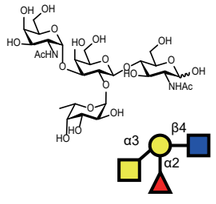
GO-4007 Blood type tetrasaccharide A Type I

M.F.: $C_{28}H_{48}N_2O_{20}$
M.W.: 732.69
CAS No.: N/A
Package: mg , g



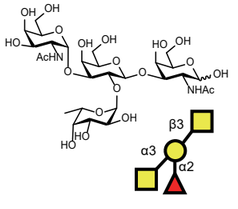
GO-4008 Blood type tetrasaccharide A Type II

M.F.: $C_{28}H_{48}N_2O_{20}$
M.W.: 732.69
CAS No.: N/A
Package: mg , g



GO-4009 Blood type tetrasaccharide A Type III/IV

M.F.: $C_{28}H_{48}N_2O_{20}$
M.W.: 732.69
CAS No.: N/A
Package: mg , g



Blood group antigen (ABH)

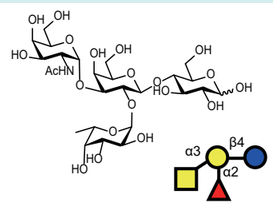
GO-4010 Blood type tetrasaccharide A Type VI

M.F.: $C_{26}H_{45}NO_{20}$

M.W.: 691.63

CAS No.: 59957-92-5

Package: mg , g



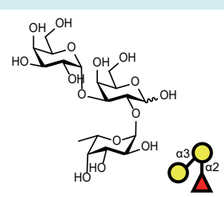
GO-4011 Blood type trisaccharide B

M.F.: $C_{18}H_{32}O_{15}$

M.W.: 488.44

CAS No.: 49777-14-2

Package: mg , g



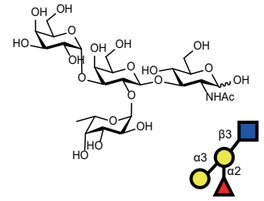
GO-4012 Blood type tetrasaccharide B Type I

M.F.: $C_{26}H_{45}NO_{20}$

M.W.: 691.63

CAS No.: N/A

Package: mg , g



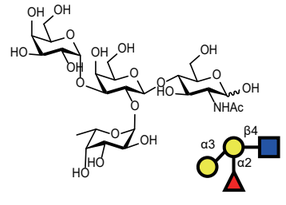
GO-4013 Blood type tetrasaccharide B Type II

M.F.: $C_{26}H_{45}NO_{20}$

M.W.: 691.63

CAS No.: N/A

Package: mg , g



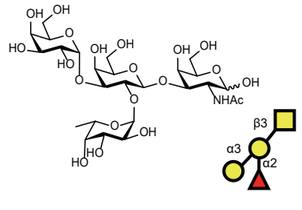
GO-4014 Blood type tetrasaccharide B Type III/IV

M.F.: $C_{26}H_{45}NO_{20}$

M.W.: 691.63

CAS No.: N/A

Package: mg , g



Blood group antigen (ABH)

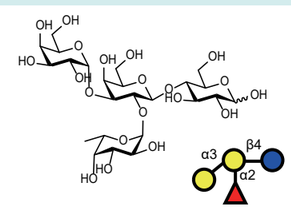
GO-4015 Blood type tetrasaccharide B Type VI

M.F.: $C_{24}H_{42}O_{20}$

M.W.: 650.58

CAS No.: N/A

Package: mg , g



Lewis antigen

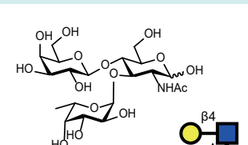
GO-4201 Lewis X (LeX) SSEA-1/CD15

M.F.: $C_{20}H_{35}NO_{15}$

M.W.: 529.49

CAS No.: 71208-06-5

Package: mg , g



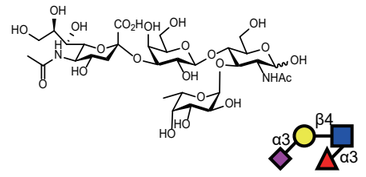
GO-4202 Sialyl Lewis X (sLe^X)

M.F.: $C_{31}H_{52}N_2O_{23}$

M.W.: 820.75

CAS No.: N/A

Package: mg , g



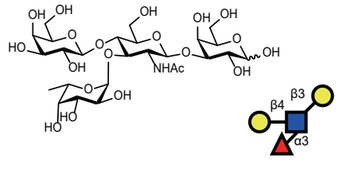
GO-4203 Lewis X (Le^X) Tetrasaccharide

M.F.: $C_{26}H_{45}NO_{20}$

M.W.: 691.63

CAS No.: N/A

Package: mg , g



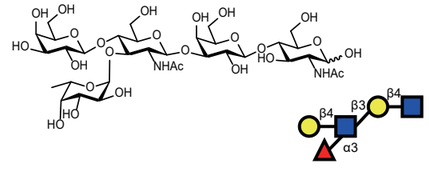
GO-4204 Lewis X (Le^X) Pentasaccharides

M.F.: $C_{34}H_{58}N_2O_{25}$

M.W.: 894.83

CAS No.: N/A

Package: mg , g



Lewis antigen

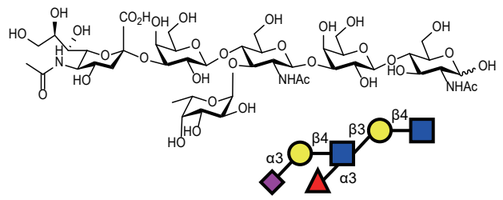
GO-4205 Sialyl Lewis X (sLe^X)-Hexasaccharide

M.F.: $C_{45}H_{75}N_3O_{33}$

M.W.: 1186.08

CAS No.: N/A

Package: mg , g



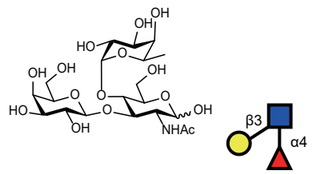
GO-4206 Lewis A (Le^a)

M.F.: $C_{20}H_{35}NO_{15}$

M.W.: 529.49

CAS No.: 56570-03-7

Package: mg , g



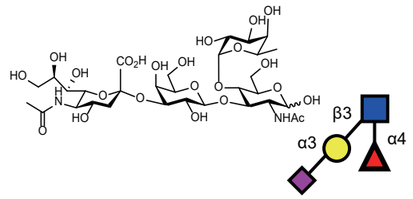
GO-4207 Sialyl Lewis A (sLe^a)

M.F.: $C_{31}H_{52}N_2O_{23}$

M.W.: 820.75

CAS No.: N/A

Package: mg , g



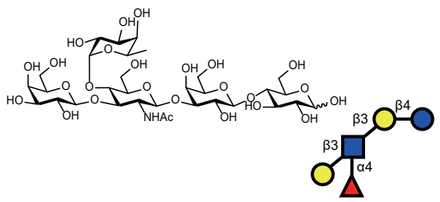
GO-4208 Lewis A (Le^a) pentasaccharide

M.F.: $C_{32}H_{55}NO_{25}$

M.W.: 853.77

CAS No.: N/A

Package: mg , g



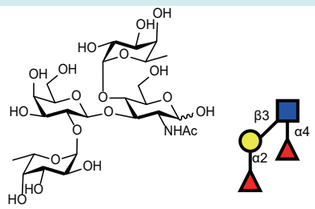
GO-4209 Lewis B (Le^b)

M.F.: $C_{26}H_{45}NO_{19}$

M.W.: 675.63

CAS No.: N/A

Package: mg , g



Lewis antigen

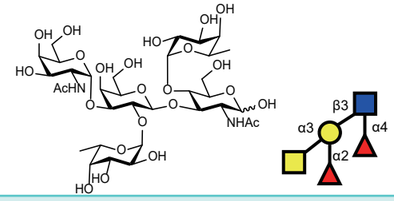
GO-4210 ALewis B (ALe^b)

M.F.: $C_{34}H_{58}N_2O_{24}$

M.W.: 878.83

CAS No.: N/A

Package: mg , g



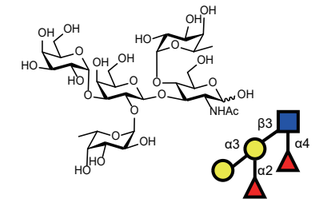
GO-4211 BLewis B (ALe^b)

M.F.: $C_{32}H_{55}NO_{24}$

M.W.: 837.78

CAS No.: N/A

Package: mg , g



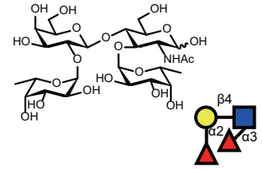
GO-4212 Lewis Y (Le^Y)

M.F.: $C_{26}H_{45}NO_{19}$

M.W.: 675.63

CAS No.: N/A

Package: mg , g



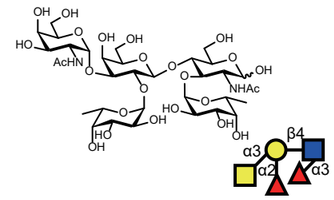
GO-4213 ALewis Y (ALe^Y)

M.F.: $C_{34}H_{58}N_2O_{24}$

M.W.: 878.83

CAS No.: N/A

Package: mg , g



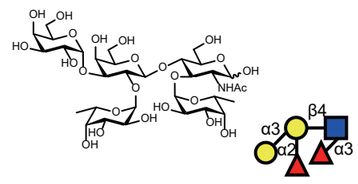
GO-4214 BLewis Y (ALe^Y)

M.F.: $C_{32}H_{55}NO_{24}$

M.W.: 837.78

CAS No.: N/A

Package: mg , g

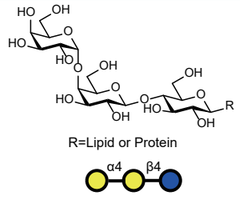


Antigen-P system antigen

GO-4301 P^k (Gala1,4Galb1,4GlcbR)

CAS No.: N/A

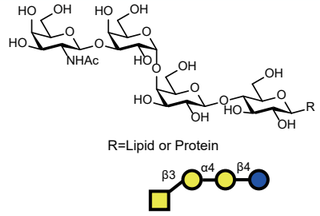
Package: mg , g



GO-4302 P (Galb1,3Gala1,4Galb1,4GlcbR)

CAS No.: N/A

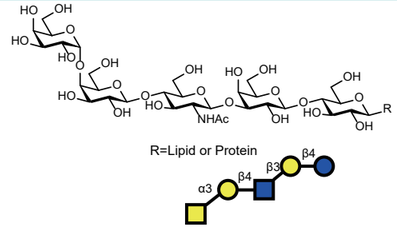
Package: mg , g



GO-4303 P1 (Gala1,4Galb1,4GlcNAcb1,3Galb1,4GlcbR)

CAS No.: N/A

Package: mg , g

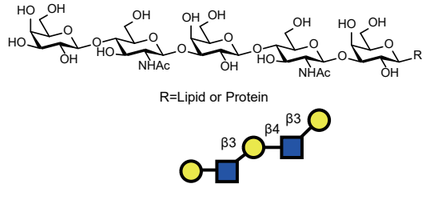


Antigen-i system antigen

GO-4351 i (Galb1,4GlcNAcb1,3Galb1,4GlcNAcb1,3GalbR)

CAS No.: N/A

Package: mg , g



Glycolipid oligosaccharides

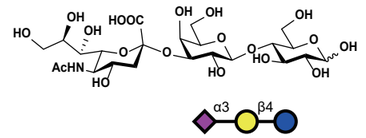
GO-4401 GM3 (3SL)

M.F.: $C_{23}H_{39}NO_{19}$

M.W.: 633.55

CAS No.: N/A

Package: mg , g



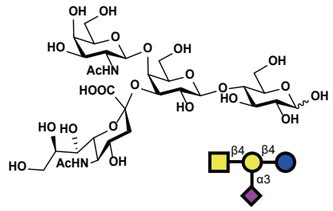
GO-4402 GM2

M.F.: $C_{31}H_{52}N_2O_{24}$

M.W.: 836.75

CAS No.: N/A

Package: mg , g



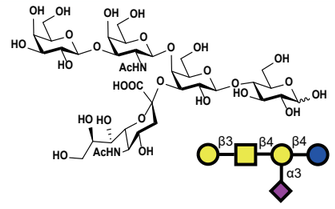
GO-4403 GM1a

M.F.: $C_{37}H_{62}N_2O_{29}$

M.W.: 998.89

CAS No.: N/A

Package: mg , g



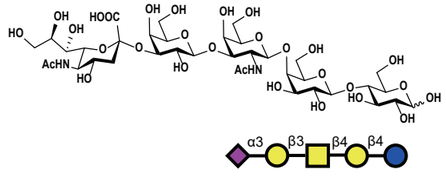
GO-4404 GM1b

M.F.: $C_{37}H_{62}N_2O_{29}$

M.W.: 998.89

CAS No.: N/A

Package: mg , g



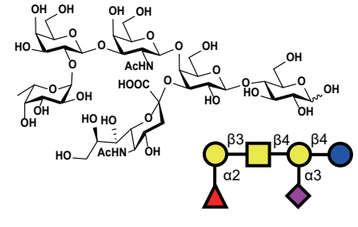
GO-4405 Fuc-GM1

M.F.: $C_{43}H_{72}N_2O_{33}$

M.W.: 1145.03

CAS No.: N/A

Package: mg , g



Glycolipid oligosaccharides

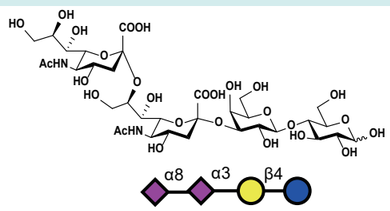
GO-4406 GD3

M.F.: $C_{34}H_{56}N_2O_{27}$

M.W.: 924.81

CAS No.: N/A

Package: mg , g



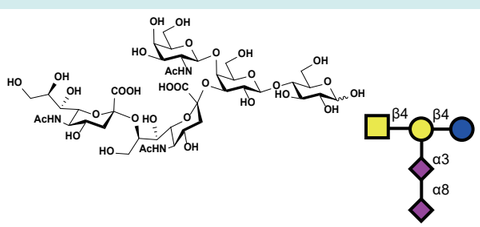
GO-4407 GD2

M.F.: $C_{42}H_{69}N_3O_{32}$

M.W.: 1128.00

CAS No.: N/A

Package: mg , g



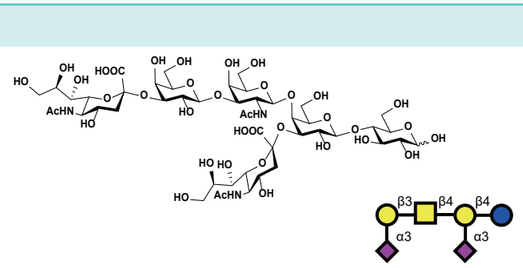
GO-4408 GD1a

M.F.: $C_{48}H_{79}N_3O_{37}$

M.W.: 1290.14

CAS No.: N/A

Package: mg , g



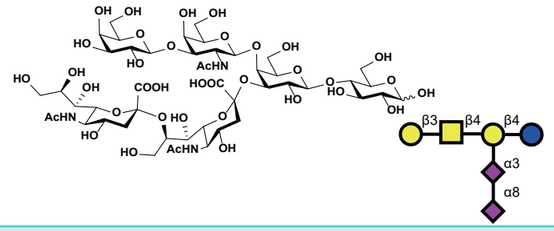
GO-4409 GD1b

M.F.: $C_{48}H_{79}N_3O_{37}$

M.W.: 1290.14

CAS No.: N/A

Package: mg , g



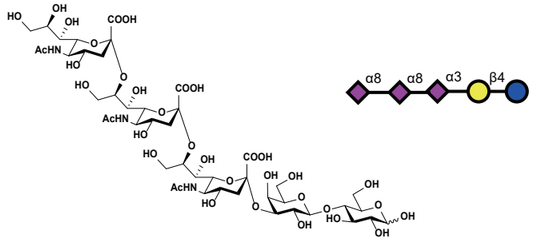
GO-4410 GT3

M.F.: $C_{45}H_{73}N_3O_{35}$

M.W.: 1216.07

CAS No.: N/A

Package: mg , g



Glycolipid oligosaccharides

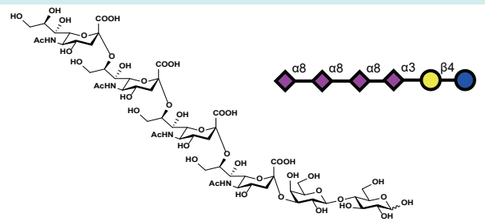
GO-4411 GQ3

M.F.: $C_{56}H_{90}N_4O_{43}$

M.W.: 1507.32

CAS No.: N/A

Package: mg , g



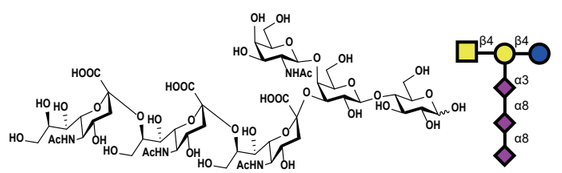
GO-4412 GT2

M.F.: $C_{53}H_{85}N_4O_{40}$

M.W.: 1418.25

CAS No.: N/A

Package: mg , g



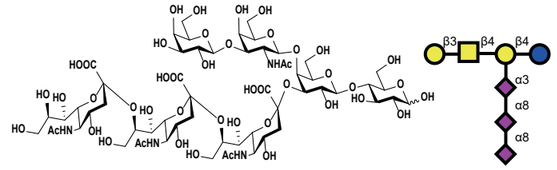
GO-4413 GT1c

M.F.: $C_{59}H_{96}N_4O_{45}$

M.W.: 1581.40

CAS No.: N/A

Package: mg , g



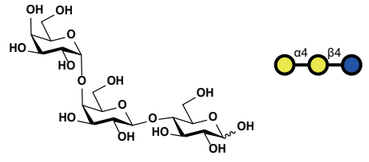
GO-4414 Gb3

M.F.: $C_{18}H_{32}O_{16}$

M.W.: 504.44

CAS No.: N/A

Package: mg , g



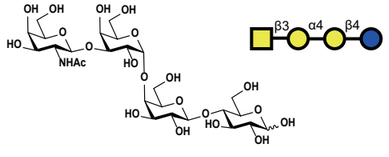
GO-4415 Gb4

M.F.: $C_{26}H_{45}NO_{21}$

M.W.: 707.63

CAS No.: N/A

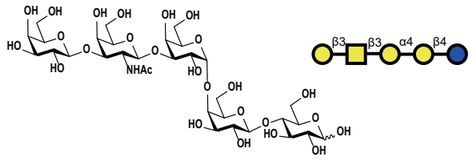
Package: mg , g



Glycolipid oligosaccharides

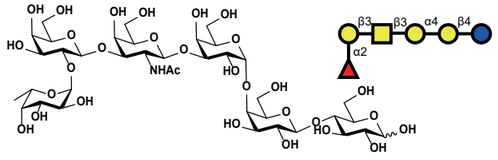
GO-4416 Gb5

M.F.: $C_{32}H_{55}NO_{26}$
M.W.: 869.77
CAS No.: N/A
Package: mg , g



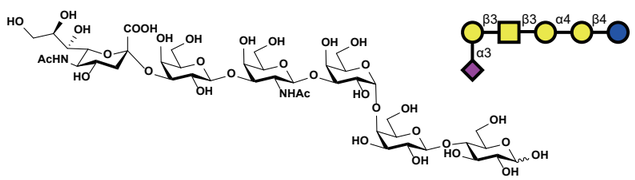
GO-4417 GloboH

M.F.: $C_{38}H_{65}NO_{30}$
M.W.: 1015.92
CAS No.: N/A
Package: mg , g



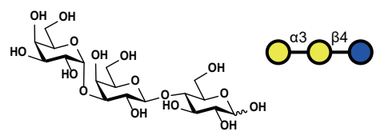
GO-4418 SSEA-4

M.F.: $C_{48}H_{79}N_3O_{37}$
M.W.: 1290.14
CAS No.: N/A
Package: mg , g



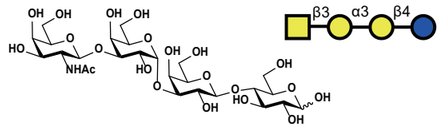
GO-4419 iGb3

M.F.: $C_{18}H_{32}O_{16}$
M.W.: 504.44
CAS No.: N/A
Package: mg , g



GO-4420 iGb4

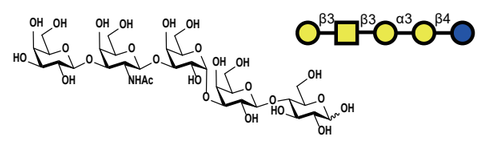
M.F.: $C_{26}H_{45}NO_{21}$
M.W.: 707.63
CAS No.: N/A
Package: mg , g



Glycolipid oligosaccharides

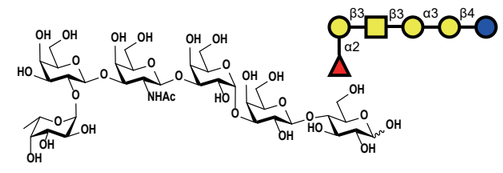
GO-4421 iGb5

M.F.: $C_{32}H_{55}NO_{26}$
M.W.: 869.77
CAS No.: N/A
Package: mg , g



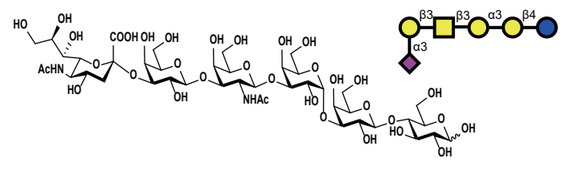
GO-4422 iGloboH

M.F.: $C_{38}H_{65}NO_{30}$
M.W.: 1015.92
CAS No.: N/A
Package: mg , g



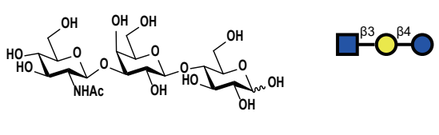
GO-4423 Sialyl-iGb5

M.F.: $C_{43}H_{72}N_2O_{34}$
M.W.: 1161.03
CAS No.: N/A
Package: mg , g



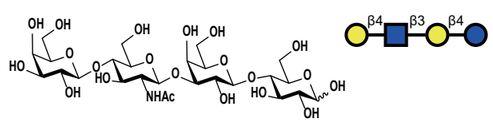
GO-4424 Lc3

M.F.: $C_{20}H_{35}NO_{16}$
M.W.: 545.49
CAS No.: N/A
Package: mg , g



GO-4425 nLc4

M.F.: $C_{26}H_{45}NO_{21}$
M.W.: 707.63
CAS No.: N/A
Package: mg , g



Glycolipid oligosaccharides

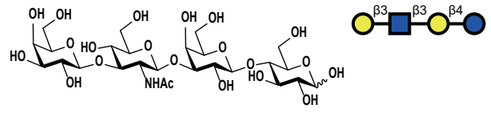
GO-4426 Lc4

M.F.: $C_{26}H_{45}NO_{21}$

M.W.: 707.63

CAS No.: N/A

Package: mg , g



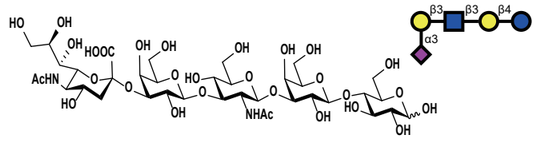
GO-4427 Sialyl-Lc4

M.F.: $C_{37}H_{62}N_2O_{29}$

M.W.: 998.89

CAS No.: N/A

Package: mg , g



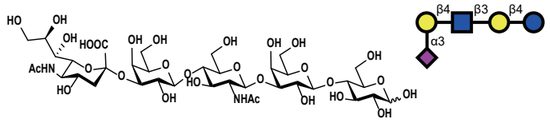
GO-4428 Sialyl-nLc4

M.F.: $C_{37}H_{62}N_2O_{29}$

M.W.: 998.89

CAS No.: N/A

Package: mg , g



Chemically modified sugar

Azidosaccharide analogues

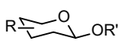
Azido sugars can be introduced into glycoproteins through the intracellular glycan biosynthesis pathway, and then covalently labeled with imaging probes or affinity probes by click chemistry. Since the majority of secreted proteins are glycoproteins, this glucose metabolism marker has been used for labeling and enrichment of secreted proteins.

Azido sugars have the following characteristics:

- Bioorthogonality—the azide group is small, non-reactive and not present in living organisms. Therefore, azido sugars do not interfere with endogenous cellular pathways and replace their naturally occurring analogues.
- Compatibility—under normal buffer conditions, azido sugar can be effectively reacted with phosphate compounds without auxiliary reagents such as copper or reducing agents.
- Chemo-selectivity—azido sugar and phosphines do not react with or interfere with components of biological samples, but are efficiently coupled to each other.
- Versatility—Azido sugar labels can be used for detection, immobilization, conjugation, and bioaffinity purification.

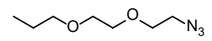
Among them, *N*-azidoacetylgalactosamine (GalNAz), *N*-azidoacetylglucosamine (GlcNAz) and *N*-azidoacetylmannosamine (ManNAz) are the most commonly used azido sugars. The obtained Ac4ManNAz, Ac4GlcNAz and Ac4GalNAz can increase the solubility of azido sugars in organic solvents and are easier to handle.

Modified oligosaccharides



β-D-glycoside

R'= (1) Azide modified alkyl :  ;

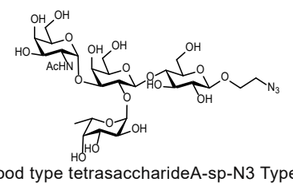
(2) PEG derivatives: 

(3) Biotin

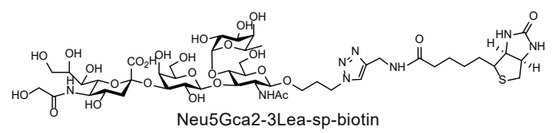
(4) Lipid

R=Monosaccharides or oligosaccharides

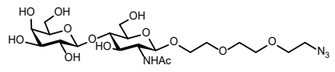
R'=Azidoalkyl, polyethylene glycol derivatives, lipid chains, biotin, etc.



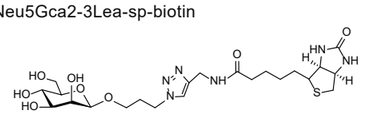
Blood type tetrasaccharideA-sp-N3 Type VI



Neu5Gca2-3Lea-sp-biotin



LacNAc-PEG-N_3



Mannose-sp-biotin

Azido-containing glycans

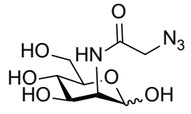
GS-0001 ManNAz

M.F.: $C_8H_{14}N_4O_6$

M.W.: 262.22

CAS No.: 361154-23-6

Package: mg to kg



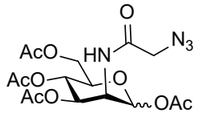
GS-0002 Ac_4ManNAz

M.F.: $C_{16}H_{22}N_4O_{10}$

M.W.: 430.37

CAS No.: 361154-30-5

Package: mg to kg



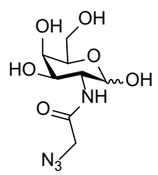
GS-0003 GalNAz

M.F.: $C_8H_{14}N_4O_6$

M.W.: 262.22

CAS No.: 869186-83-4

Package: mg to kg



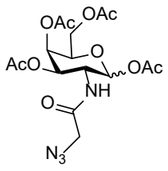
GS-0004 Ac_4GalNAz

M.F.: $C_{16}H_{22}N_4O_{10}$

M.W.: 430.37

CAS No.: 653600-56-7

Package: mg to kg



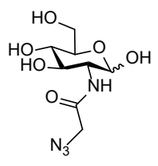
GS-0005 GlcNAz

M.F.: $C_8H_{14}N_4O_6$

M.W.: 262.22

CAS No.: 92659-90-0

Package: mg to kg



Azido-containing glycans

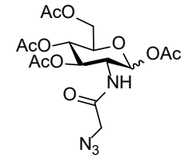
GS-0006 Ac_4GlcNAz

M.F.: $C_{16}H_{22}N_4O_{10}$

M.W.: 430.37

CAS No.: 98924-81-3

Package: mg to kg



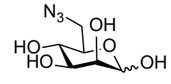
GS-0007 6-azido-6-deoxy-D-mannose

M.F.: $C_6H_{11}N_3O_5$

M.W.: 205.17

CAS No.: 316379-15-4

Package: mg to kg



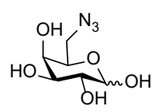
GS-0008 6-azido-6-deoxy-D-galactose

M.F.: $C_6H_{11}N_3O_5$

M.W.: 205.17

CAS No.: 66927-03-5

Package: mg to kg



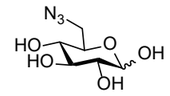
GS-0009 6-azido-6-deoxy-D-glucose

M.F.: $C_6H_{11}N_3O_5$

M.W.: 205.17

CAS No.: 20847-05-6

Package: mg to kg



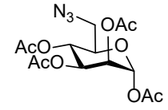
GS-0010 1,2,3,4-tetra-O-acetyl-6-azido-6-deoxy-a-D-mannose

M.F.: $C_{14}H_{19}N_3O_9$

M.W.: 373.32

CAS No.: 210170-40-4

Package: mg to kg



Azido-containing glycans

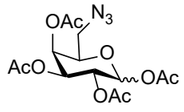
GS-0011 1,2,3,4-tetra-O-acetyl-6-azido-6-deoxy-D-galactose

M.F.: $C_{14}H_{19}N_3O_9$

M.W.: 373.32

CAS No.: 629620-22-0

Package: mg to kg



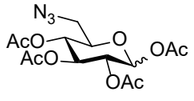
GS-0012 1,2,3,4-tetra-O-acetyl-6-azido-6-deoxy-D-glucopyranose

M.F.: $C_{14}H_{19}N_3O_9$

M.W.: 373.32

CAS No.: 189618-61-9

Package: mg to kg



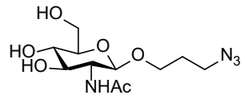
GS-0013 $GlcNAcproN_3$

M.F.: $C_{11}H_{20}N_4O_6$

M.W.: 304.30

CAS No.: 595568-99-3

Package: mg to kg



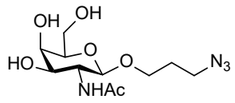
GS-0014 $GalNAcproN_3$

M.F.: $C_{11}H_{20}N_4O_6$

M.W.: 304.30

CAS No.: 874120-65-7

Package: mg to kg



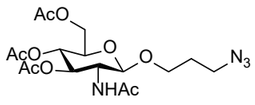
GS-0015 $Ac_3GlcNAcproN_3$

M.F.: $C_{17}H_{26}N_4O_9$

M.W.: 430.41

CAS No.: 595568-98-2

Package: mg to kg



Azido-containing glycans

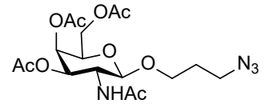
GS-0016 $Ac_3GalNAcproN_3$

M.F.: $C_{17}H_{26}N_4O_9$

M.W.: 430.41

CAS No.: 874120-66-8

Package: mg to kg



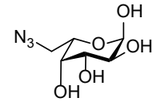
GS-0017 6-azido-6-deoxy-L-galactose

M.F.: $C_6H_{11}N_3O_5$

M.W.: 205.17

CAS No.: 70932-63-7

Package: mg to kg



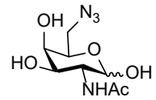
GS-0018 6-AzGalNAc

M.F.: $C_8H_{14}N_4O_5$

M.W.: 246.22

CAS No.: N/A

Package: mg to kg



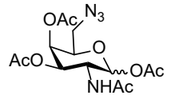
GS-0019 $Ac_36AzGalNAc$

M.F.: $C_{14}H_{20}N_4O_8$

M.W.: 372.33

CAS No.: 657363-19-4

Package: mg to kg



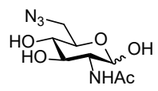
GS-0020 6-AzGlcNAc

M.F.: $C_8H_{14}N_4O_5$

M.W.: 246.22

CAS No.: 1611491-03-2

Package: mg to kg



Azido-containing glycans

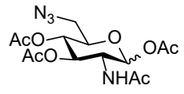
GS-0021 $Ac_3$6AzGlcNAc

M.F.: $C_{14}H_{20}N_4O_8$

M.W.: 372.33

CAS No.: 487027-19-0

Package: mg to kg



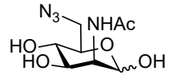
GS-0022 6-AzManNAc

M.F.: $C_8H_{14}N_4O_5$

M.W.: 246.22

CAS No.: 2555160-60-4

Package: mg to kg



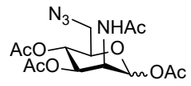
GS-0023 $Ac_3$6-AzManNAc

M.F.: $C_{14}H_{20}N_4O_8$

M.W.: 372.33

CAS No.: 487027-18-9

Package: mg to kg



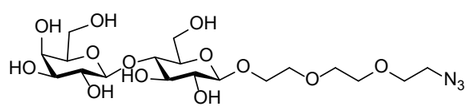
GS-0024 Lactose-PEG-N_3

M.F.: $C_{18}H_{33}N_3O_{13}$

M.W.: 499.47

CAS No.: 246855-74-3

Package: mg to kg



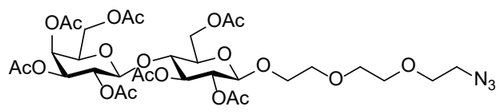
GS-0025 Ac_7Lactose-PEG-N_3

M.F.: $C_{32}H_{47}N_3O_{20}$

M.W.: 793.73

CAS No.: 153253-42-0

Package: mg to kg



Azido-containing glycans

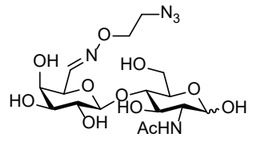
GS-0026 N_3-LacNAc

M.F.: $C_{16}H_{27}N_5O_{11}$

M.W.: 465.42

CAS No.: N/A

Package: mg to kg



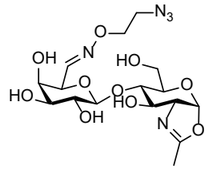
GS-0027 N_3-LacNAc-Oxa

M.F.: $C_{16}H_{25}N_5O_{10}$

M.W.: 447.16

CAS No.: N/A

Package: mg to kg



Alkynyl-containing glycans

Alkynyl sugar have small functional groups and are not reactive with endogenous molecules. When delivered to cells, these alkynyl sugars are incorporated by glycosylation events, and then the alkynyl sugar are specifically covalently labeled with imaging probes or affinity probes by click chemistry.

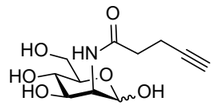
GS-1001 ManNAl

M.F.: $C_{11}H_{17}NO_6$

M.W.: 259.26

CAS No.: 935658-94-9

Package: mg to kg



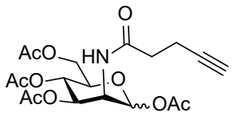
GS-1002 Ac_4ManNAl

M.F.: $C_{19}H_{25}NO_{10}$

M.W.: 427.41

CAS No.: 935658-93-8

Package: mg to kg



Alkynyl-containing glycans

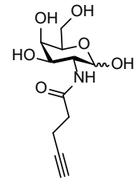
GS-1003 GalNAl

M.F.: $C_{11}H_{17}NO_6$

M.W.: 259.26

CAS No.: 2244888-87-5

Package: mg to kg



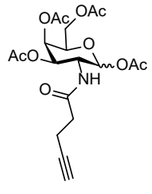
GS-1004 Ac_4GalNAl

M.F.: $C_{19}H_{25}NO_{10}$

M.W.: 427.41

CAS No.: 1810852-60-8

Package: mg to kg



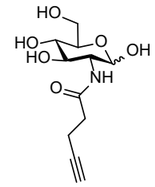
GS-1005 GlcNAl

M.F.: $C_{11}H_{17}NO_6$

M.W.: 259.26

CAS No.: 1030262-99-7

Package: mg to kg



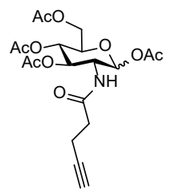
GS-1006 Ac_4GlcNAl

M.F.: $C_{19}H_{25}NO_{10}$

M.W.: 427.41

CAS No.: 1361993-37-4

Package: mg to kg



Sialic acid derivatives

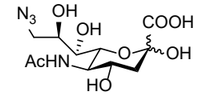
GS-2001 9-AzSiaNAc

M.F.: $C_{11}H_{18}N_4O_8$

M.W.: 334.29

CAS No.: 160555-88-4

Package: mg to kg



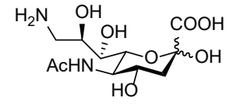
GS-2002 9-NH_2SiaNAc

M.F.: $C_{11}H_{20}N_2O_8$

M.W.: 308.29

CAS No.: 160555-89-5

Package: mg to kg



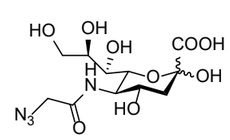
GS-2003 SiaNAz

M.F.: $C_{11}H_{18}N_4O_9$

M.W.: 350.28

CAS No.: 756823-87-7

Package: mg to kg



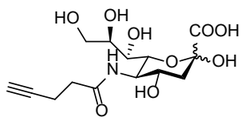
GS-2004 SiaNAl

M.F.: $C_{14}H_{21}NO_9$

M.W.: 347.32

CAS No.: 1639411-94-1

Package: mg to kg



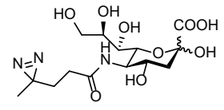
GS-2005 SiaDAz

M.F.: $C_{14}H_{23}N_3O_9$

M.W.: 377.35

CAS No.: N/A

Package: mg to kg



Sialic acid derivatives

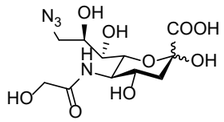
GS-2007 9-AzNeu5Gc

M.F.: $C_{11}H_{18}N_4O_9$

M.W.: 350.28

CAS No.: N/A

Package: mg to kg



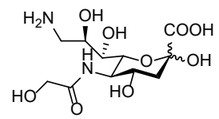
GS-2008 9-NH_2Neu5Gc

M.F.: $C_{11}H_{20}N_2O_9$

M.W.: 324.29

CAS No.: N/A

Package: mg to kg



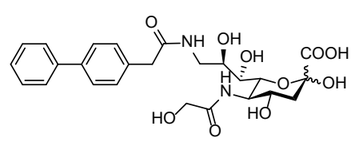
GS-2009 BPA-Neu5Gc

M.F.: $C_{25}H_{30}N_2O_{10}$

M.W.: 518.52

CAS No.: 2803296-78-6

Package: mg to kg



Phosphate glycans

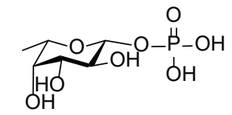
GS-3001 Fucose 1-phosphate

M.F.: $C_6H_{13}O_8P$

M.W.: 244.14

CAS No.: 16562-58-6

Package: mg to kg



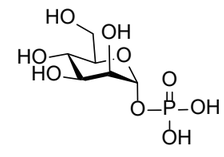
GS-3002 Mannose 1-phosphate

M.F.: $C_6H_{13}O_9P$

M.W.: 260.13

CAS No.: 27251-84-9

Package: mg to kg



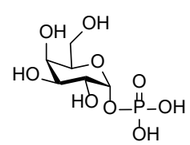
GS-3003 Galactose 1-phosphate

M.F.: $C_6H_{13}O_9P$

M.W.: 260.13

CAS No.: 2255-14-3

Package: mg to kg



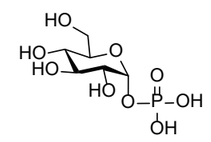
GS-3004 Glucose 1-phosphate

M.F.: $C_6H_{13}O_9P$

M.W.: 260.13

CAS No.: 59-56-3

Package: mg to kg



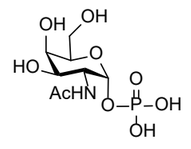
GS-3005 GalNAc-1-P (2-Acetamido-2-deoxyhexopyranose 1-phosphate)

M.F.: $C_8H_{16}NO_9P$

M.W.: 301.19

CAS No.: N/A

Package: mg to kg



Phosphate glycans

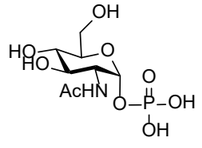
GS-3006 GlcNAc-1-P

M.F.: $C_8H_{16}NO_9P$

M.W.: 301.19

CAS No.: 901851-43-2

Package: mg to kg



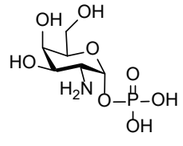
GS-3007 α- D-neneneba galactose amine 1-phosphate

M.F.: $C_6H_{14}NO_8P$

M.W.: 259.15

CAS No.: 75656-33-6

Package: mg to kg



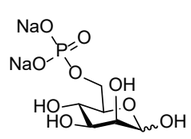
GS-3008 D-mannose 6-phosphate disodium salt

M.F.: $C_6H_{13}Na_2O_{10}P$

M.W.: 322.11

CAS No.: 33068-18-7

Package: mg to kg



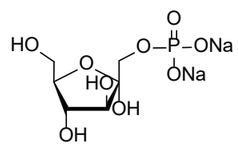
GS-3009 D-fructose-1-phosphate sodium salt

M.F.: $C_6H_{11}Na_2O_9P$

M.W.: 304.10

CAS No.: 71662-09-4

Package: mg to kg



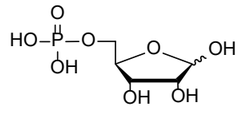
GS-3010 a-D-Ribose-5-phosphate

M.F.: $C_5H_{11}O_8P$

M.W.: 230.11

CAS No.: 34980-65-9

Package: mg to kg



Miscellaneous glycans

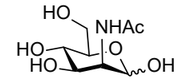
GS-4007 ManNAc

M.F.: $C_8H_{15}NO_6$

M.W.: 221.21

CAS No.: 4773-29-9

Package: mg to kg



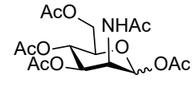
GS-4008 Ac_4ManNAc

M.F.: $C_{16}H_{23}NO_{10}$

M.W.: 389.36

CAS No.: 76375-61-6

Package: mg to kg



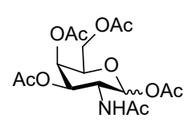
GS-4009 Ac_4GalNAc

M.F.: $C_{16}H_{23}NO_{10}$

M.W.: 389.36

CAS No.: 76375-60-5

Package: mg to kg



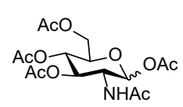
GS-4010 Ac_4GlcNAc

M.F.: $C_{16}H_{23}NO_{10}$

M.W.: 389.36

CAS No.: 14086-90-9

Package: mg to kg



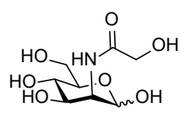
GS-4012 ManNGc

M.F.: $C_8H_{15}NO_7$

M.W.: 237.21

CAS No.: 119943-65-6

Package: mg to kg



Miscellaneous glycans

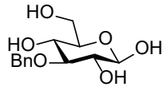
GS-4013 3-OBnGlc

M.F.: $C_{13}H_{18}O_6$

M.W.: 270.28

CAS No.: 97590-76-6

Package: mg to kg



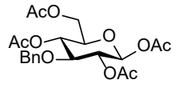
GS-4014 3-OBnAc$_4$Glc

M.F.: $C_{21}H_{26}O_{10}$

M.W.: 438.43

CAS No.: 39686-94-7

Package: mg to kg



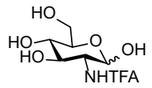
GS-4016 GlcNTFA

M.F.: $C_8H_{12}F_3NO_6$

M.W.: 275.18

CAS No.: 36875-26-0

Package: mg to kg



Modified oligosaccharides

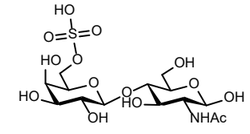
GSO-5001 (HSO_4 -6-)Galb1,4GlcNAc

M.F.: $C_{14}H_{25}NO_{14}S$

M.W.: 463.41

CAS No.: N/A

Package: mg to kg



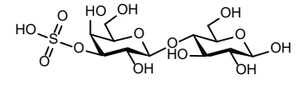
GSO-5002 (HSO_4 -3-)Galb1,4Glc

M.F.: $C_{12}H_{22}O_{14}S$

M.W.: 422.35

CAS No.: N/A

Package: mg to kg



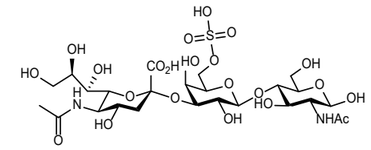
GSO-5003 Neu5Aca2,3 (HSO_4-6-)Galb1,4GlcNAc

M.F.: $C_{25}H_{42}N_2O_{22}S$

M.W.: 754.66

CAS No.: N/A

Package: mg to kg



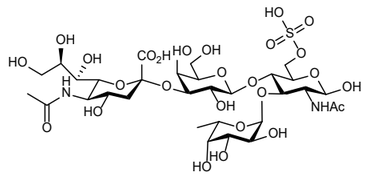
GSO-5004 Neu5Aca2,3Galb1,4(Fuca1,3)(HSO4-6-)GlcNAc

M.F.: $C_{31}H_{52}N_2O_{26}S$

M.W.: 900.81

CAS No.: N/A

Package: mg to kg



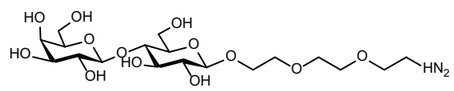
GSO-5005 Lactose PEG-NH_2

M.F.: $C_{18}H_{34}N_2O_{13}$

M.W.: 486.47

CAS No.: N/A

Package: mg to kg



Modified oligosaccharides

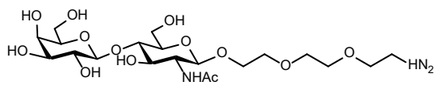
GSO-5008	LacNAc PEG-NH_2

M.F.: $C_{20}H_{37}N_3O_{13}$

M.W.: 527.52

CAS No.: N/A

Package: mg to kg



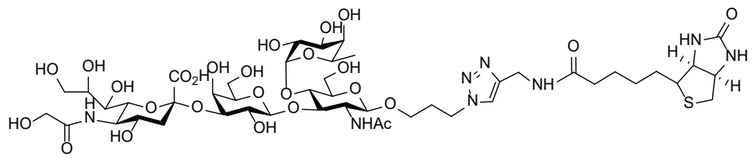
GSO-5009	Neu5Gca2-3Le^a-sp-biotin

M.F.: $C_{47}H_{76}N_8O_{26}S$

M.W.: 1201.22

CAS No.: N/A

Package: mg to kg



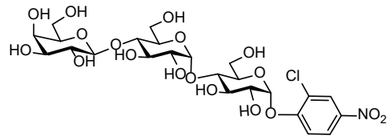
GY-001	Gal-G2-CNP

M.F.: $C_{24}H_{34}ClNO_{18}$

M.W.: 659.98

CAS No.: 157381-11-8

Package: 10 g, 100 g, 1 kg



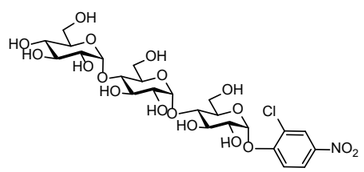
GY-002	G3-CNP

M.F.: $C_{24}H_{34}ClNO_{18}$

M.W.: 659.98

CAS No.: 118291-90-0

Package: 10 g, 100 g, 1 kg



Glycolipid

Introduction to Glycosphingolipid

Glycosphingolipid (GSL), composed of ceramide and oligosaccharide chains, is ubiquitously found in the plasma membrane of eukaryotic cells. Due to the variability of oligosaccharide and ceramide moieties, a number of GSLs was generated. They participate in and regulate apoptosis, cell proliferation, endocytosis, intracellular trafficking, cell migration, senescence and inflammation, which are crucial to tumorigenesis, cancer progression, and anticancer therapy. Therefore, GSLs are expected to become tumor diagnostic markers and immunotherapy targets.

Sphingosine, also known as nerve sphingosine, is the structural unit of various sphingolipids such as ceramide, ganglioside, glomeruloside, sulfate ester, and sphingomyelin. It has the highest content in nerve tissue and cell membrane. It has 18 carbon chains with double bond at carbon 4. It is the most abundant sphingosine in animal tissues. Lysosphingolipids inhibit the activity of protein kinase C, leading to the pathogenesis of sphingolipid disorders such as Krabbe's and Gaucher's diseases. Sphingosine can be phosphorylated by two kinases to form sphingosine-1-phosphate, which has an important functions in signaling. While sphingosine and ceramide can induce apoptosis, sphingosine-1-phosphate can promote cell survival or proliferation. Sphingosine has been shown to cause increased cytoplasmic calcium levels in cells.

In order to explore the interaction between GSLs and various pathogens, toxins, cells, etc., glycolipid chips have been formulated. Most of them are immobilized on hydrophobic materials by non-covalent binding. Previous studies have shown that the glycolipid microarray can efficiently distinguish human urine samples infected from non-infected with Mycobacterium tuberculosis.

Glycolipid

Name (Series)	Abbreviation	
Lacto	($LcOSe_4$)	Galb3GlcNAcb3Galb4Glcb1Ceramide
Lactoneo	($LcnOSe_4$)	Galb4GlcNAcb3Galb4Glcb1Ceramide
Globo	($GbOSe_4$)	GalNAcb3Gala4Galb4Glcb1Ceramide
Isoglobo	($GbiOSe_4$)	GalNAcb3Gala3Galb4Glcb1Ceramide
Ganglio	($GgOSe_4$)	Galb3GalNAcb4Galb4Glcb1Ceramide
Muco	($MucOSe_4$)	Galb3Galb3Galb4Glcb1Ceramide
Gala	($GalOSe_2$)	Gala4Galb1Ceramide
Sulfatide		3-0-SulfoGal3b1Ceramide

Reference:

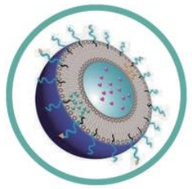
[*] Russo D, et al.. 2013. Dec; 280(24):6338-53.

[**]Zhang J, et al.. Biosens Bioelectron. 2011. Oct 15;28(1):355-61.

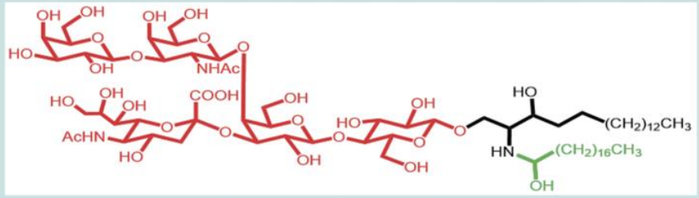
Application Scenario

Drug Intermediates

Drug vaccine



mRNA encapsulation



Sugar chain module

Monosaccharide lipid ~
Ganglio ~70 kinds
Lacto ~150 kinds
Neolacto ~250 kinds
Globo ~50 kinds
Isoglobo ~50 kinds

Sphingosine module

d18:0, d18:1
d16:1, d14:1

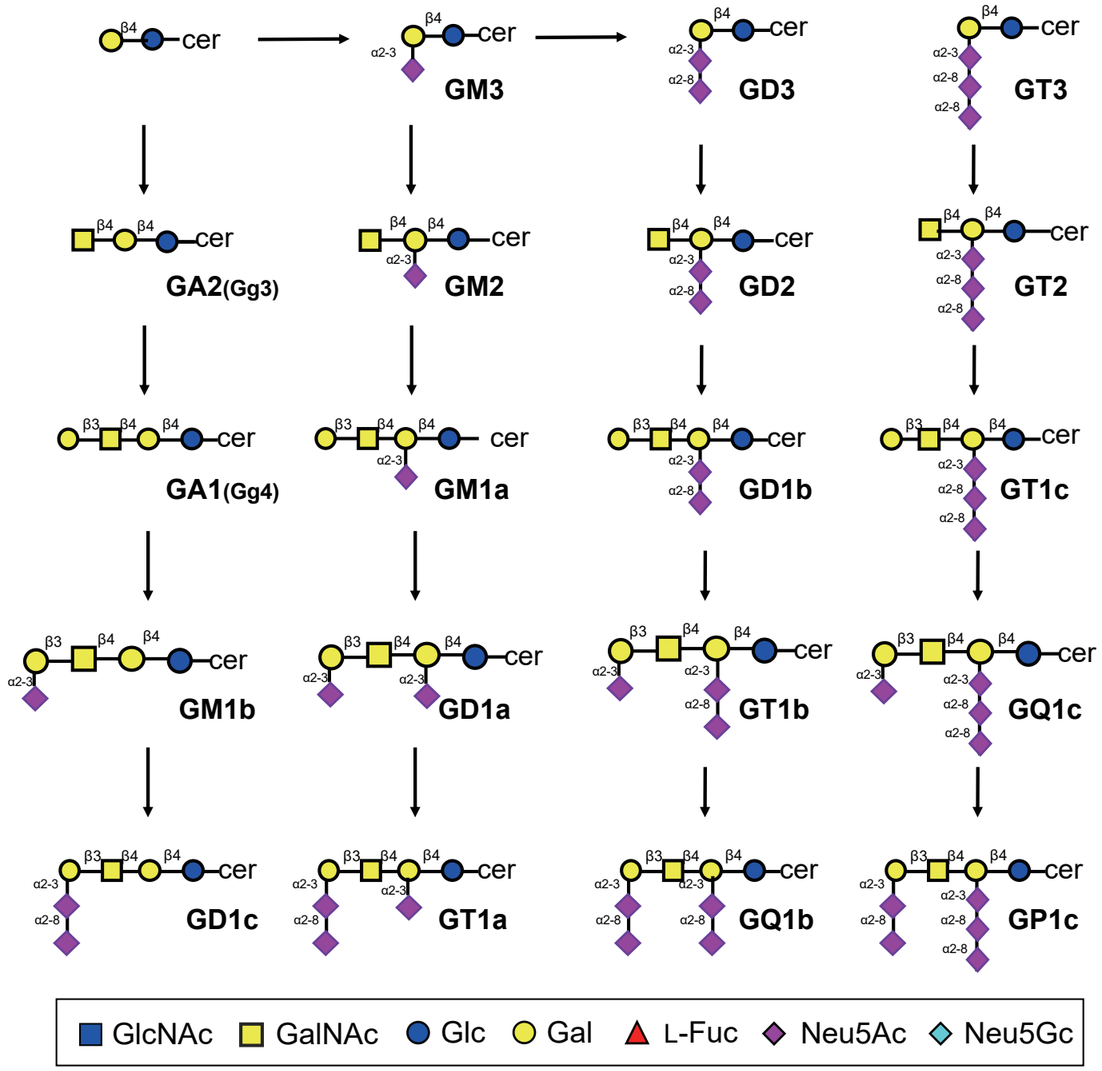
Fatty acid module

C14-C30
- double bond
- Hydroxylation
- Methylation
- .....

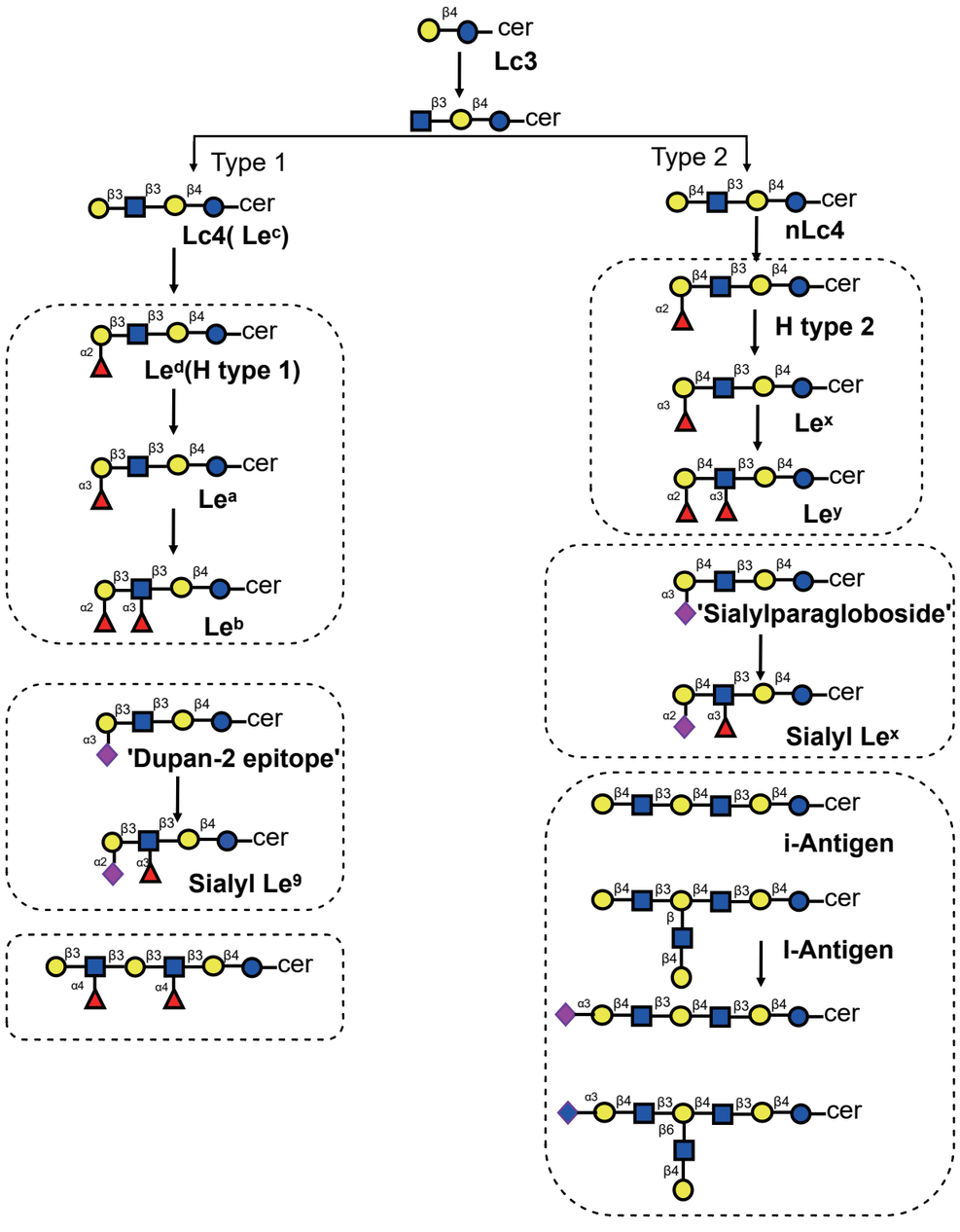
Sphingosine

Sphingosine, also known as nerve sphingosine, whose scientific name is 2-amino-4-octadecene-1,3-diol, belongs to sphingolipids. sphingosine is the structural unit of ceramide, ganglioside, glycoside, sulfate, sphingomyelin and other sphingolipids. It has the highest content in nerve tissue and cell membrane. Sphingosine, with 18 carbon chains and carbon 4 double bonds, is the most abundant sphingosine in animal tissue. Hemolytic sphingolipids inhibit the activity of protein kinase C, leading to the onset of sphingolipids such as Krabbe's disease and Gaucher's disease. Sphingosine can phosphorylate two kinases to form sphingosine 1-phosphate, which has an important signal transduction function. Although sphingosine and ceramide can induce apoptosis, sphingosine 1-phosphate can promote cell survival or proliferation. Sphingosine has been shown to increase cytoplasmic calcium levels in cells.

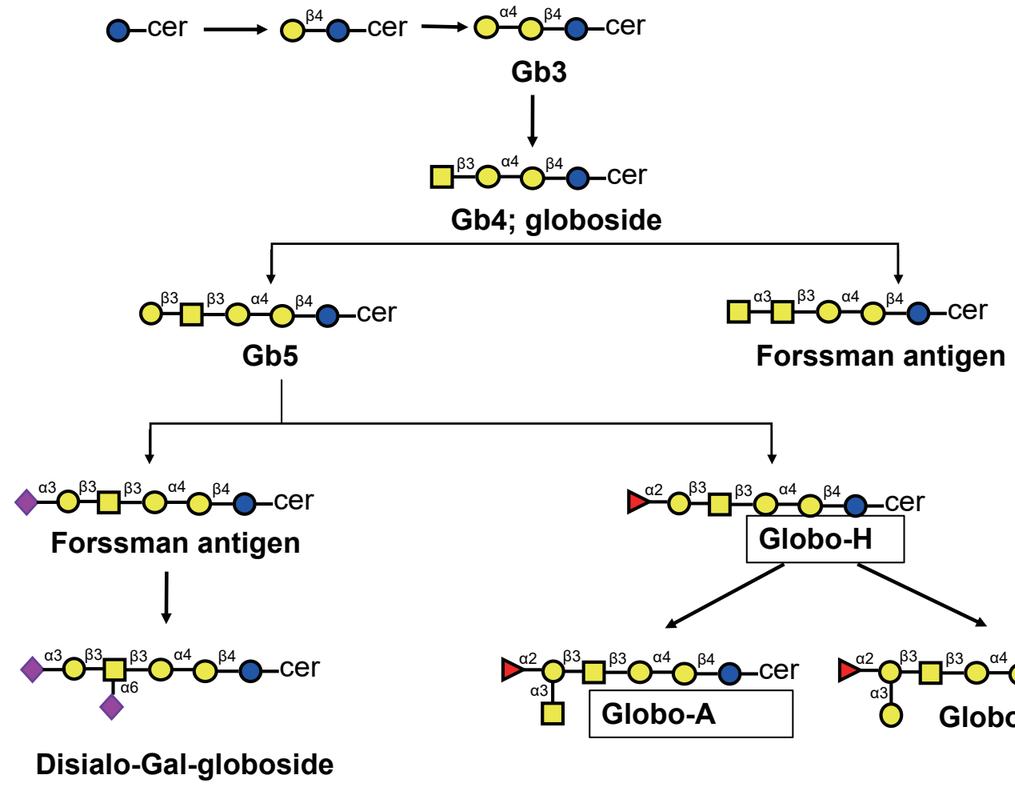
Ganglio-series GSLs



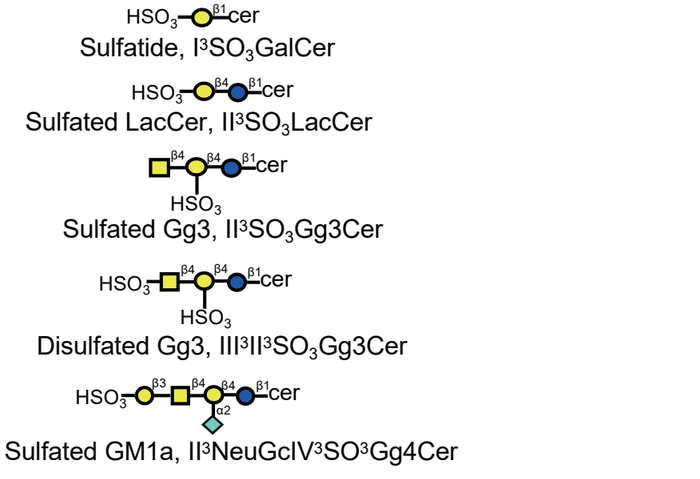
Lacto-series GSLs



Globo-series GSLs



Ulfated glycolipids.



KRN7000

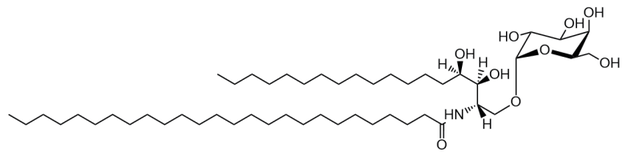
Background Introduction

KRN7000 is a synthetic glycolipid with antitumor and immunostimulatory effects. α-Galactosylceramide is a very potent NKT cell agonist that binds strongly to CD1d. The complex of α-Galactosylceramide and CD1d binds to the T-cell antigen receptor of NKT cells[*].

Reference:

[*]Park JJ, etc.. Bioorg Med Chem Lett. 2008 Jul 15;18(14):3906-9.

GL-1001 KRN7000 CAS：158021-47-7



Sphingosine series

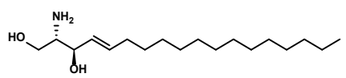
GLQ-0001 Sphingosine(d18:1)

M.F.: $C_{18}H_{37}NO_2$

M.W.: 299.5

CAS No.: 123-78-4

Package: mg to kg



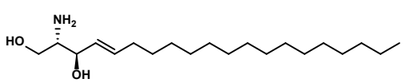
GLQ-0002 Sphingosine(d20:1)

M.F.: $C_{20}H_{41}NO_2$

M.W.: 327.55

CAS No.: 6918-49-6

Package: mg to kg



Sphingosine series

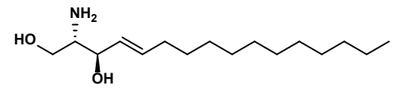
GLQ-0003 Sphingosine(d16:1)

M.F.: $C_{16}H_{33}NO_2$

M.W.: 271.45

CAS No.: 6982-9-8

Package: mg to kg



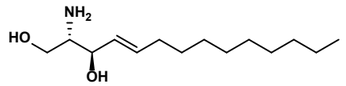
GLQ-0004 Sphingosine(d14:1)

M.F.: $C_{14}H_{29}NO_2$

M.W.: 243.39

CAS No.: 24558-60-9

Package: mg to kg



Monosaccharide series

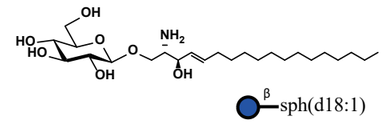
GL-0001 Glcsph d18:1 (GlcbSphingosine)

M.F.: $C_{24}H_{47}NO_7$

M.W.: 461.64

CAS No.: 52050-17-6

Package: mg to kg



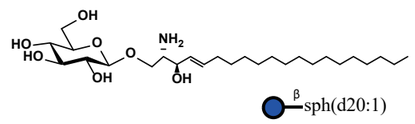
GL-0002 Glcsph d20:1 (GlcbSphingosine)

M.F.: $C_{26}H_{51}NO_7$

M.W.: 489.69

CAS No.: N/A

Package: mg to kg



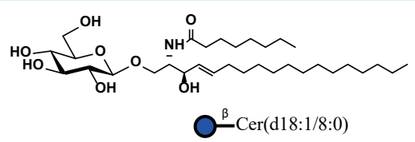
GL-1002 GlcCer d18:1/ 8:0 (GlcbCeramide)

M.F.: $C_{32}H_{61}NO_8$

M.W.: 587.84

CAS No.: 111956-47-9

Package: mg to kg



Monosaccharide series

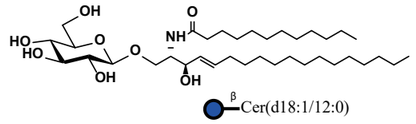
GL-1003 GlcCer d18:1/12:0 (GlcbCeramide)

M.F.: $C_{36}H_{69}NO_8$

M.W.: 643.95

CAS No.: 111956-48-0

Package: mg to kg



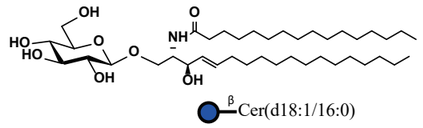
GL-1004 GlcCer d18:1/16:0 (GlcbCeramide)

M.F.: $C_{40}H_{77}NO_8$

M.W.: 700.06

CAS No.: 74365-77-8

Package: mg to kg



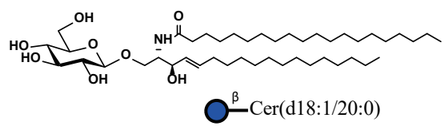
GL-1006 GlcCer d18:1/20:0 (GlcbCeramide)

M.F.: $C_{44}H_{85}NO_8$

M.W.: 756.16

CAS No.: N/A

Package: mg to kg



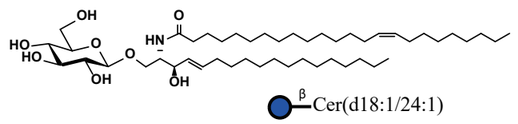
GL-1007 GlcCer d18:1/24:1 (GlcbCeramide)

M.F.: $C_{48}H_{91}NO_8$

M.W.: 810.26

CAS No.: 887907-50-8

Package: mg to kg



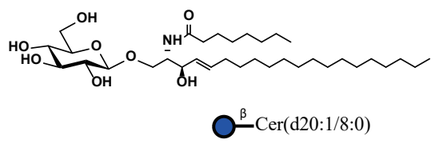
GL-1008 GlcCer d20:1/8:0 (GlcbCeramide)

M.F.: $C_{34}H_{65}NO_8$

M.W.: 615.89

CAS No.: N/A

Package: mg to kg



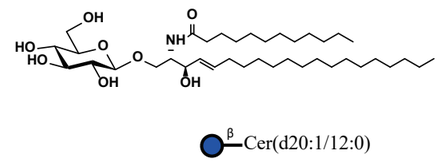
GL-1009 GlcCer d20:1/12:0 (GlcbCeramide)

M.F.: $C_{38}H_{73}NO_8$

M.W.: 672.00

CAS No.: N/A

Package: mg to kg



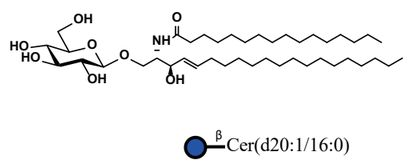
GL-1010 GlcCer d20:1/16:0 (GlcbCeramide)

M.F.: $C_{42}H_{81}NO_8$

M.W.: 728.11

CAS No.: N/A

Package: mg to kg



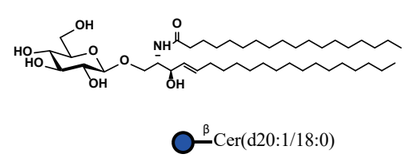
GL-1011 GlcCer d20:1/18:0 (GlcbCeramide)

M.F.: $C_{44}H_{85}NO_8$

M.W.: 756.16

CAS No.: N/A

Package: mg to kg



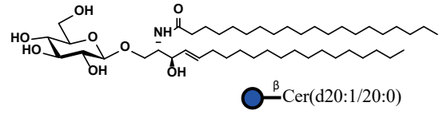
GL-1012 GlcCer d20:1/20:0 (GlcbCeramide)

M.F.: $C_{46}H_{89}NO_8$

M.W.: 784.22

CAS No.: N/A

Package: mg to kg



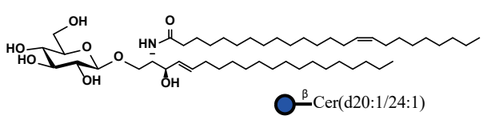
GL-1013 GlcCer d20:1/24:1 (GlcbCeramide)

M.F.: $C_{50}H_{95}NO_8$

M.W.: 838.31

CAS No.: N/A

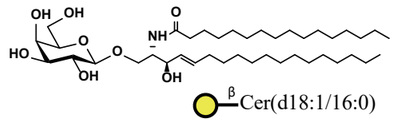
Package: mg to kg



Monosaccharide series

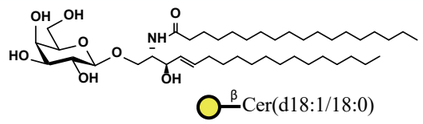
GL-1016 GalCer d18:1/16:0 (GalbCeramide)

M.F.: $C_{40}H_{77}NO_8$
M.W.: 700.06
CAS No.: 2260795-77-3
Package: mg to kg



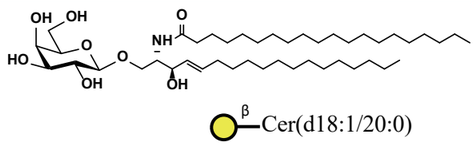
GL-1017 Galc d18:1/18:0 (GalbCeramide)

M.F.: $C_{42}H_{81}NO_8$
M.W.: 728.11
CAS No.: N/A
Package: mg to kg



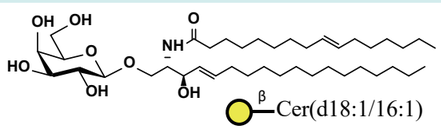
GL-1018 Galc d18:1/20:0 (GalbCeramide)

M.F.: $C_{44}H_{85}NO_8$
M.W.: 756.16
CAS No.: N/A
Package: mg to kg



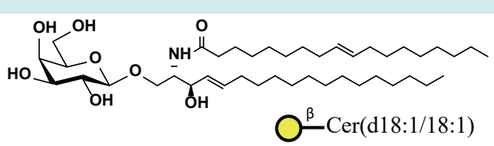
GL-1020 Galc d18:1/16:1 (GalbCeramide)

M.F.: $C_{40}H_{75}NO_8$
M.W.: 698.04
CAS No.: N/A
Package: mg to kg



GL-1021 Galc d18:1/18:1 (GalbCeramide)

M.F.: $C_{42}H_{79}NO_8$
M.W.: 726.09
CAS No.: N/A
Package: mg to kg



Lactose series

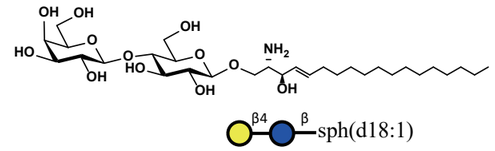
Background Introduction

Lactose series glycolipids play an important role in embryonic development. The GSLs spectrum of mouse embryonic development showed that lactose series glycosphingolipid were mainly expressed in the pre implantation stage and during gastrulation [*]. In addition, the lack of GlcCer and LacCer during the embryonic stage will lead to embryo death [* *].

Reference:
[*]Yamashita T, et al.. 1999. Proc Natl Acad Sci USA 96, 9142–9147.
[**]Kumagai T, et al.. 2010. Glycoconj J 27, 685–695.

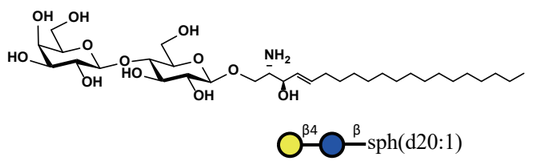
GL-0003 Lacsph d18:1 (Galb1,4GlcbSphingosine)

M.F.: $C_{30}H_{57}NO_{12}$
M.W.: 623.78
CAS No.: 109785-20-8
Package: mg to kg



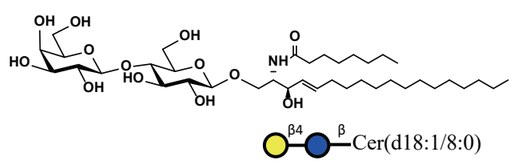
GL-0004 Lacsph d20:1 (Galb1,4GlcbSphingosine)

M.F.: $C_{32}H_{61}NO_{12}$
M.W.: 651.84
CAS No.: N/A
Package: mg to kg



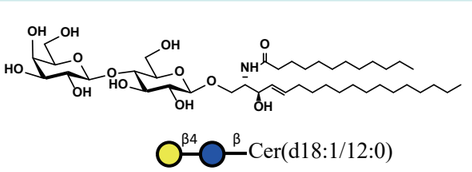
GL-2001 LacCer d18:1/8:0 (Galb1,4GlcbCeramide)

M.F.: $C_{38}H_{71}NO_{13}$
M.W.: 749.98
CAS No.: 384842-72-2
Package: mg to kg



GL-2002 LacCer d18:1/12:0 (Galb1,4GlcbCeramide)

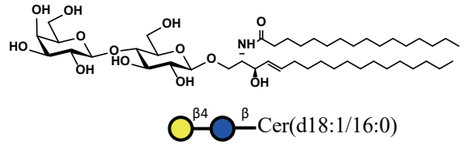
M.F.: $C_{42}H_{79}NO_{13}$
M.W.: 806.09
CAS No.: 474943-80-1
Package: mg to kg



Lactose series

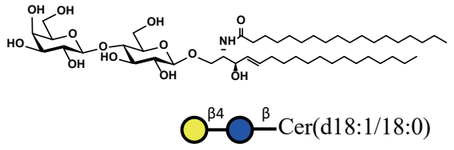
GL-2003 LacCer d18:1/16:0 (Galb1,4GlcbCeramide)

M.F.: $C_{46}H_{87}NO_{13}$
M.W.: 862.20
CAS No.: 4201-62-1
Package: mg to kg



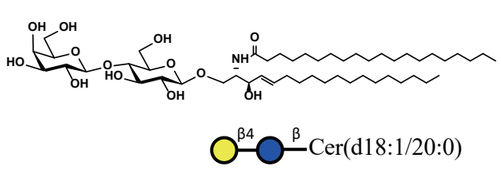
GL-2004 LacCer d18:1/18:0 (Galb1,4GlcbCeramide)

M.F.: $C_{48}H_{91}NO_{13}$
M.W.: 890.25
CAS No.: 125712-73-4
Package: mg to kg



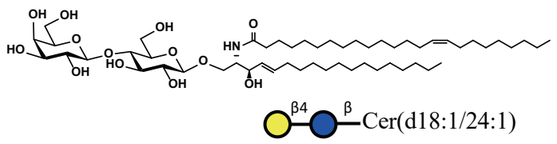
GL-2005 LacCer d18:1/20:0 (Galb1,4GlcbCeramide)

M.F.: $C_{50}H_{95}NO_{13}$
M.W.: 918.30
CAS No.: 125650-87-5
Package: mg to kg



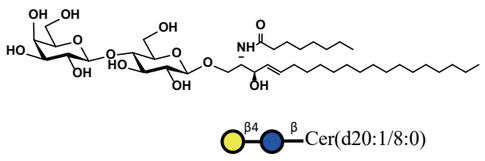
GL-2006 LacCer d18:1/24:1 (Galb1,4GlcbCeramide)

M.F.: $C_{54}H_{101}NO_{13}$
M.W.: 972.40
CAS No.: 483370-78-1
Package: mg to kg



GL-2007 LacCer d20:1/8:0 (Galb1,4GlcbCeramide)

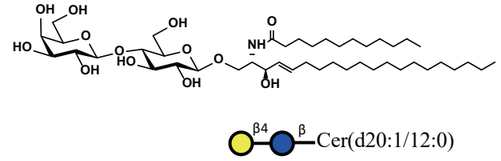
M.F.: $C_{40}H_{75}NO_{13}$
M.W.: 778.03
CAS No.: N/A
Package: mg to kg



Lactose series

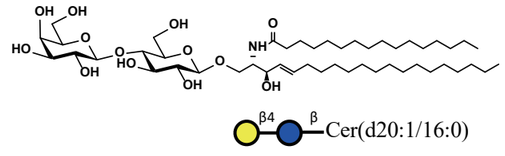
GL-2008 LacCer d20:1/12:0 (Galb1,4GlcbCeramide)

M.F.: $C_{44}H_{83}NO_{13}$
M.W.: 834.14
CAS No.: N/A
Package: mg to kg



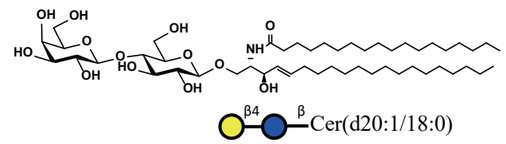
GL-2009 LacCer d20:1/16:0 (Galb1,4GlcbCeramide)

M.F.: $C_{48}H_{91}NO_{13}$
M.W.: 890.25
CAS No.: N/A
Package: mg to kg



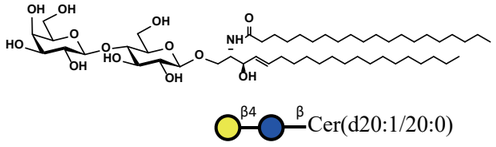
GL-2010 LacCer d20:1/18:0 (Galb1,4GlcbCeramide)

M.F.: $C_{50}H_{95}NO_{13}$
M.W.: 918.30
CAS No.: N/A
Package: mg to kg



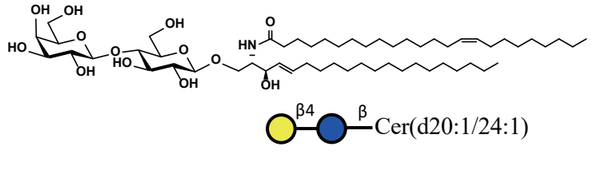
GL-2011 LacCer d20:1/20:0 (Galb1,4GlcbCeramide)

M.F.: $C_{52}H_{99}NO_{13}$
M.W.: 946.36
CAS No.: N/A
Package: mg to kg



GL-2012 LacCer d20:1/24:1 (Galb1,4GlcbCeramide)

M.F.: $C_{56}H_{105}NO_{13}$
M.W.: 1000.45
CAS No.: 474943-80-1
Package: mg to kg



Lc3

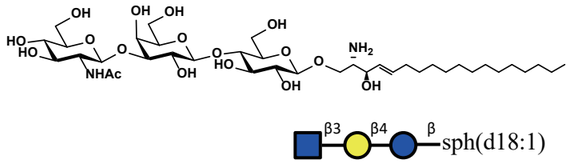
GL-0057 Lc3sph d18:1 (GlcNAcb1,3Galb1,4GlcbSphingosine)

M.F.: $C_{38}H_{70}N_2O_{17}$

M.W.: 826.98

CAS No.: N/A

Package: mg to kg



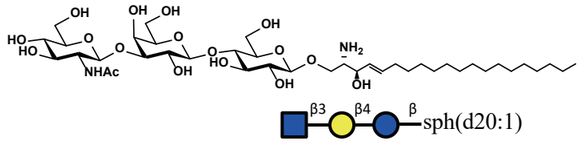
GL-0058 Lc3sph d20:1 (GlcNAcb1,3Galb1,4GlcbSphingosine)

M.F.: $C_{41}H_{78}N_2O_{17}$

M.W.: 871.07

CAS No.: N/A

Package: mg to kg



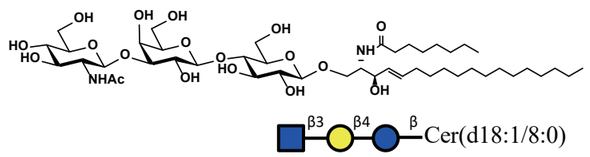
GL-2457 Lc3Cer d18:1/8:0 (GlcNAcb1,3Galb1,4GlcbCeramide)

M.F.: $C_{47}H_{88}N_2O_{18}$

M.W.: 969.22

CAS No.: N/A

Package: mg to kg



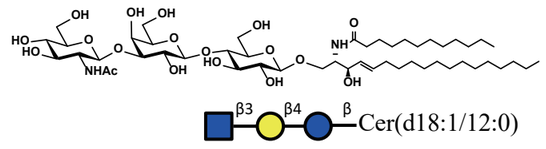
GL-2458 Lc3Cer d18:1/12:0 (GlcNAcb1,3Galb1,4GlcbCeramide)

M.F.: $C_{50}H_{92}N_2O_{18}$

M.W.: 1008.63

CAS No.: N/A

Package: mg to kg



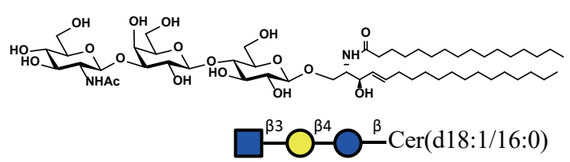
GL-2459 Lc3Cer d18:1/16:0 (GlcNAcb1,3Galb1,4GlcbCeramide)

M.F.: $C_{54}H_{100}N_2O_{18}$

M.W.: 1065.39

CAS No.: N/A

Package: mg to kg



Lc3

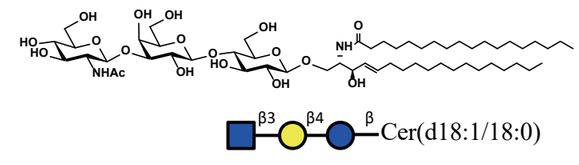
GL-2460 Lc3Cer d18:1/18:0 (GlcNAcb1,3Galb1,4GlcbCeramide)

M.F.: $C_{56}H_{104}N_2O_{18}$

M.W.: 1093.44

CAS No.: N/A

Package: mg to kg



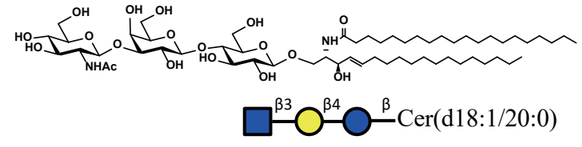
GL-2461 Lc3Cer d18:1/20:0 (GlcNAcb1,3Galb1,4GlcbCeramide)

M.F.: $C_{58}H_{108}N_2O_{18}$

M.W.: 1121.50

CAS No.: N/A

Package: mg to kg



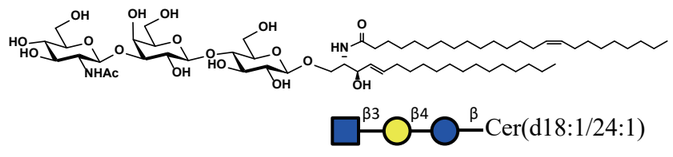
GL-2462 Lc3Cer d18:1/24:1 (GlcNAcb1,3Galb1,4GlcbCeramide)

M.F.: $C_{62}H_{114}N_2O_{18}$

M.W.: 1175.81

CAS No.: N/A

Package: mg to kg



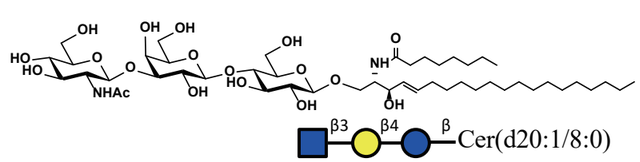
GL-2463 Lc3Cer d20:1/8:0 (GlcNAcb1,3Galb1,4GlcbCeramide)

M.F.: $C_{48}H_{88}N_5O_{18}$

M.W.: 981.23

CAS No.: 474943-80-1

Package: mg to kg



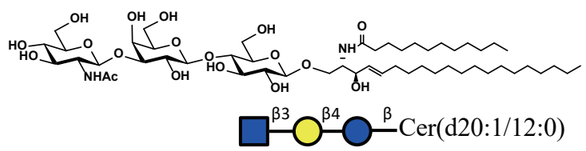
GL-2464 Lc3Cer d20:1/12:0 (GlcNAcb1,3Galb1,4GlcbCeramide)

M.F.: $C_{53}H_{100}N_2O_{18}$

M.W.: 1053.38

CAS No.: N/A

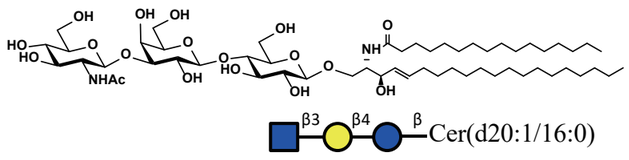
Package: mg to kg



Lc3

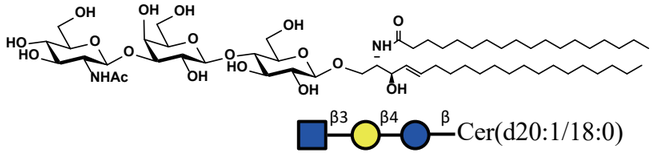
GL-2465 Lc3Cer d20:1/16:0 (GlcNAcb1,3Galb1,4GlcbCeramide)

M.F.: $C_{56}H_{104}N_2O_{18}$
M.W.: 1093.44
CAS No.: N/A
Package: mg to kg



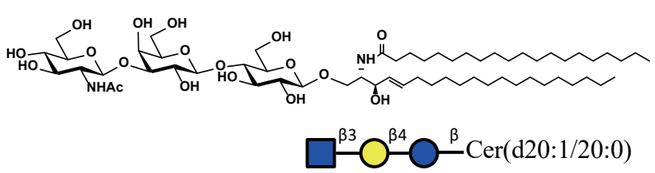
GL-2466 Lc3Cer d20:1/18:0 (GlcNAcb1,3Galb1,4GlcbCeramide)

M.F.: $C_{58}H_{108}N_2O_{18}$
M.W.: 1121.50
CAS No.: N/A
Package: mg to kg



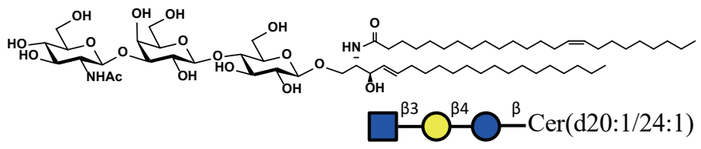
GL-2467 Lc3Cer d20:1/20:0 (GlcNAcb1,3Galb1,4GlcbCeramide)

M.F.: $C_{60}H_{112}N_2O_{18}$
M.W.: 1149.55
CAS No.: N/A
Package: mg to kg



GL-2468 Lc3Cer d20:1/24:1 (GlcNAcb1,3Galb1,4GlcbCeramide)

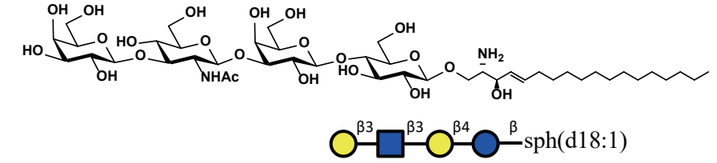
M.F.: $C_{64}H_{118}N_2O_{18}$
M.W.: 1203.64
CAS No.: N/A
Package: mg to kg



Lc4

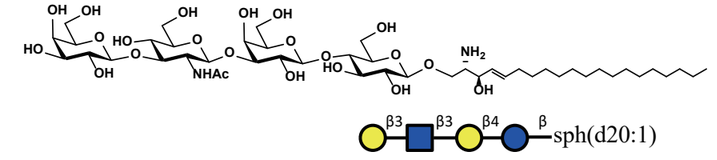
GL-0061 Lc4sph d18:1 (Galb1,3GlcNAcb1,3Galb1,4GlcbSphingosine)

M.F.: $C_{44}H_{80}N_2O_{22}$
M.W.: 989.12
CAS No.: N/A
Package: mg to kg



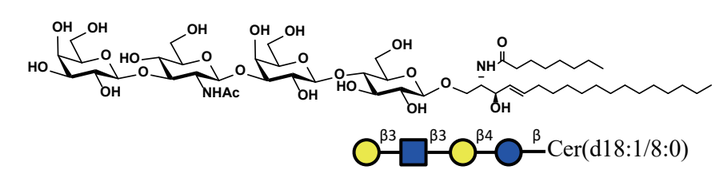
GL-0062 Lc4sph d20:1 (Galb1,3GlcNAcb1,3Galb1,4GlcbSphingosine)

M.F.: $C_{46}H_{84}N_2O_{22}$
M.W.: 1017.17
CAS No.: N/A
Package: mg to kg



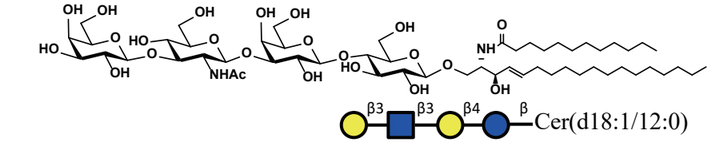
GL-2481 Lc4Cer d18:1/8:0 (Galb1,3GlcNAcb1,3Galb1,4GlcbCeramide)

M.F.: $C_{52}H_{94}N_2O_{23}$
M.W.: 1115.32
CAS No.: N/A
Package: mg to kg



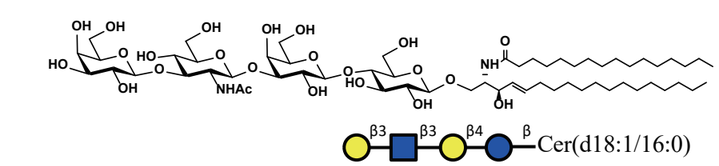
GL-2482 Lc4Cer d18:1/12:0 (Galb1,3GlcNAcb1,3Galb1,4GlcbCeramide)

M.F.: $C_{56}H_{102}N_2O_{23}$
M.W.: 1171.42
CAS No.: N/A
Package: mg to kg



GL-2483 Lc4Cer d18:1/16:0 (Galb1,3GlcNAcb1,3Galb1,4GlcbCeramide)

M.F.: $C_{60}H_{110}N_2O_{23}$
M.W.: 1227.53
CAS No.: N/A
Package: mg to kg



Lc4

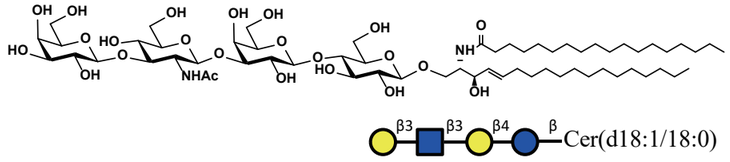
GL-2484 Lc4Cer d18:1/18:0 (Galb1,3GlcNAcb1,3Galb1,4GlcbCeramide)

M.F.: $C_{62}H_{114}N_2O_{23}$

M.W.: 1255.59

CAS No.: N/A

Package: mg to kg



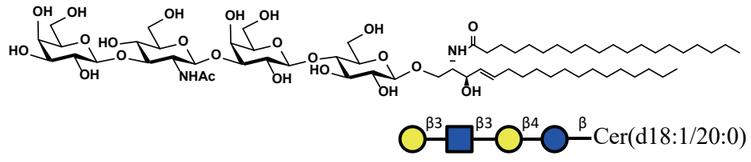
GL-2485 Lc4Cer d18:1/20:0 (Galb1,3GlcNAcb1,3Galb1,4GlcbCeramide)

M.F.: $C_{64}H_{118}N_2O_{23}$

M.W.: 1283.64

CAS No.: N/A

Package: mg to kg



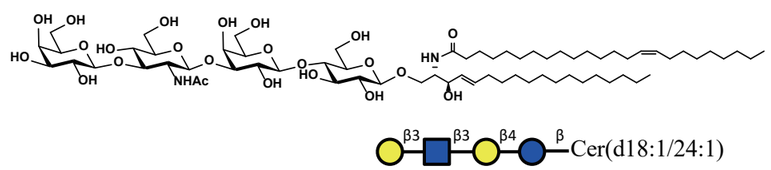
GL-2486 Lc4Cer d18:1/24:1 (Galb1,3GlcNAcb1,3Galb1,4GlcbCeramide)

M.F.: $C_{68}H_{124}N_2O_{23}$

M.W.: 1337.73

CAS No.: N/A

Package: mg to kg



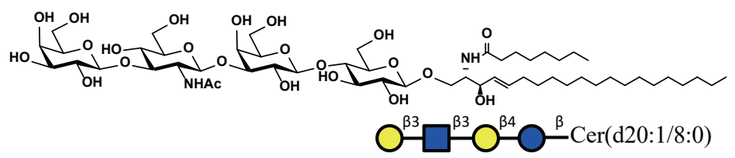
GL-2487 Lc4Cer d20:1/8:0 (Galb1,3GlcNAcb1,3Galb1,4GlcbCeramide)

M.F.: $C_{54}H_{98}N_2O_{23}$

M.W.: 1143.37

CAS No.: N/A

Package: mg to kg



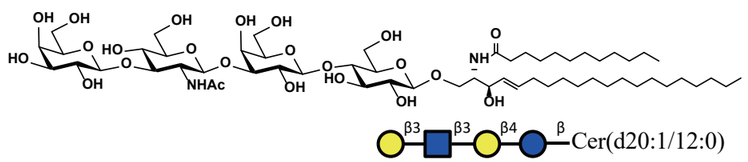
GL-2488 Lc4Cer d20:1/12:0 (Galb1,3GlcNAcb1,3Galb1,4GlcbCeramide)

M.F.: $C_{58}H_{106}N_2O_{23}$

M.W.: 1199.48

CAS No.: N/A

Package: mg to kg



Lc4

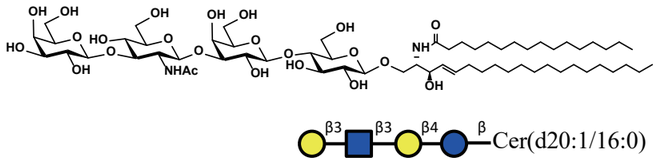
GL-2489 Lc4Cer d20:1/16:0 (Galb1,3GlcNAcb1,3Galb1,4GlcbCeramide)

M.F.: $C_{64}H_{114}N_2O_{23}$

M.W.: 1255.59

CAS No.: N/A

Package: mg to kg



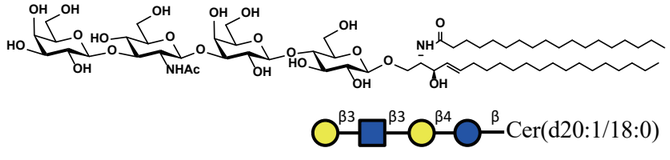
GL-2490 Lc4Cer d20:1/18:0 (Galb1,3GlcNAcb1,3Galb1,4GlcbCeramide)

M.F.: $C_{64}H_{118}N_2O_{23}$

M.W.: 1283.64

CAS No.: N/A

Package: mg to kg



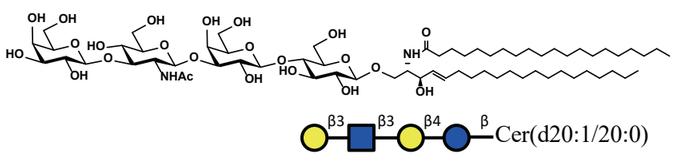
GL-2491 Lc4Cer d20:1/20:0 (Galb1,3GlcNAcb1,3Galb1,4GlcbCeramide)

M.F.: $C_{66}H_{122}N_2O_{23}$

M.W.: 1311.69

CAS No.: N/A

Package: mg to kg



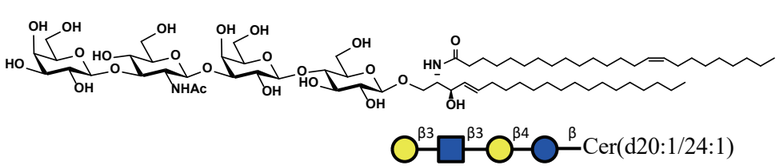
GL-2492 Lc4Cer d20:1/24:1 (Galb1,3GlcNAcb1,3Galb1,4GlcbCeramide)

M.F.: $C_{70}H_{128}N_2O_{23}$

M.W.: 1365.79

CAS No.: N/A

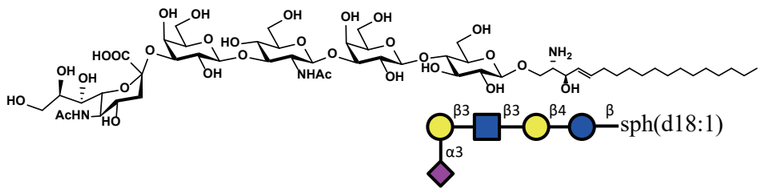
Package: mg to kg



Sialyl-Lc4)

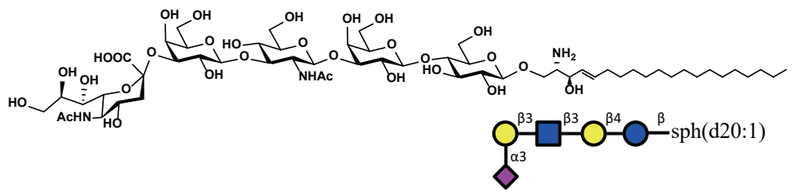
GL-0063	Sialyl-Lc4sph d18:1 ((Neu5Aca2,3)Galb1,3GlcNAcb1,3Galb1,4GlcbSphingosine)

M.F.: $C_{57}H_{97}N_3O_{30}$
M.W.: 1280.37
CAS No.: N/A
Package: mg to kg



GL-0064	Sialyl-Lc4sph d20:1 ((Neu5Aca2,3)Galb1,3GlcNAcb1,3Galb1,4GlcbSphingosine)

M.F.: $C_{57}H_{101}N_3O_{30}$
M.W.: 1308.43
CAS No.: N/A
Package: mg to kg

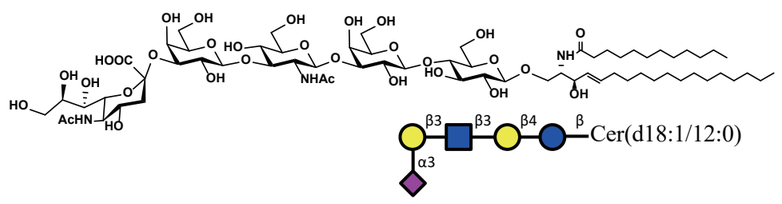


GL-2493	Sialyl-Lc4Cer d18:1/8:0 ((Neu5Aca2,3)Galb1,3GlcNAcb1,3Galb1,4GlcbCeramide)

M.F.: $C_{63}H_{111}N_3O_{31}$
M.W.: 1406.57
CAS No.: N/A
Package: mg to kg

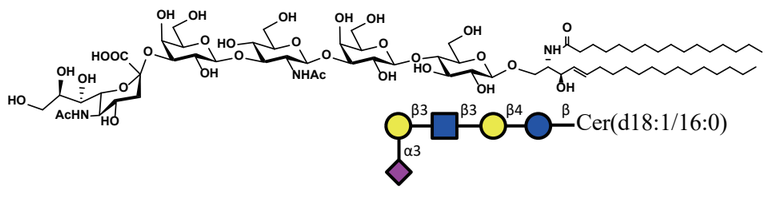
GL-2494	Sialyl-Lc4Cer d18:1/12:0 ((Neu5Aca2,3)Galb1,3GlcNAcb1,3Galb1,4GlcbCeramide)

M.F.: $C_{67}H_{119}N_3O_{31}$
M.W.: 1462.68
CAS No.: N/A
Package: mg to kg



GL-2495	Sialyl-Lc4Cer d18:1/16:0 ((Neu5Aca2,3)Galb1,3GlcNAcb1,3Galb1,4GlcbCeramide)

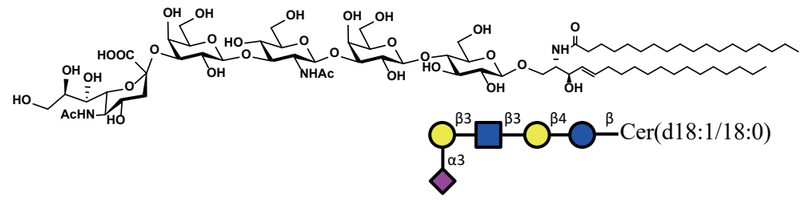
M.F.: $C_{71}H_{127}N_3O_{31}$
M.W.: 1518.79
CAS No.: N/A
Package: mg to kg



Sialyl-Lc4)

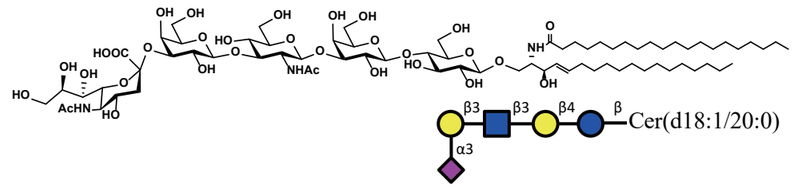
GL-2496	Sialyl-Lc4Cer d18:1/18:0 ((Neu5Aca2,3)Galb1,3GlcNAcb1,3Galb1,4GlcbCeramide)

M.F.: $C_{73}H_{131}N_3O_{31}$
M.W.: 1546.84
CAS No.: N/A
Package: mg to kg



GL-2497	Sialyl-Lc4Cer d18:1/20:0 ((Neu5Aca2,3)Galb1,3GlcNAcb1,3Galb1,4GlcbCeramide)

M.F.: $C_{75}H_{135}N_3O_{31}$
M.W.: 1574.90
CAS No.: N/A
Package: mg to kg

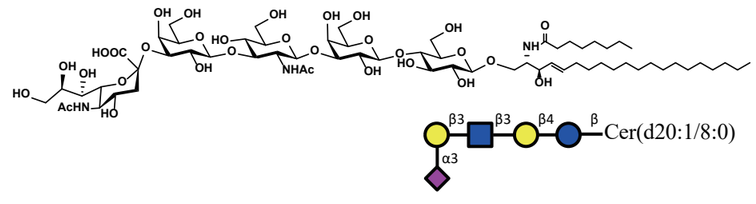


GL-2498	Sialyl-Lc4Cer d18:1/24:1 ((Neu5Aca2,3)Galb1,3GlcNAcb1,3Galb1,4GlcbCeramide)

M.F.: $C_{79}H_{141}N_3O_{31}$
M.W.: 1628.99
CAS No.: N/A
Package: mg to kg

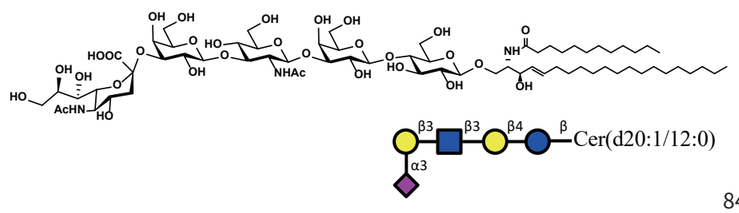
GL-2499	Sialyl-Lc4Cer d20:1/8:0 ((Neu5Aca2,3)Galb1,3GlcNAcb1,3Galb1,4GlcbCeramide)

M.F.: $C_{65}H_{115}N_3O_{31}$
M.W.: 1434.63
CAS No.: N/A
Package: mg to kg



GL-2500	Sialyl-Lc4Cer d20:1/12:0 ((Neu5Aca2,3)Galb1,3GlcNAcb1,3Galb1,4GlcbCeramide)

M.F.: $C_{69}H_{123}N_3O_{31}$
M.W.: 1490.73
CAS No.: N/A
Package: mg to kg



Sialyl-Lc4)

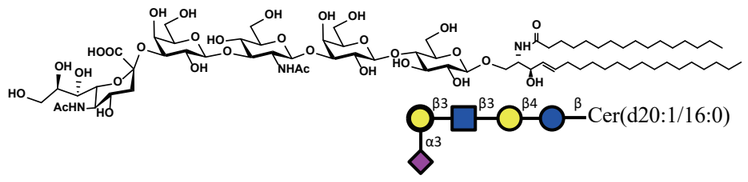
GL-2501 Sialyl-Lc4Cer d20:1/16:0 ((Neu5Aca2,3)Galb1,3GlcNAcb1,3Galb1,4GlcbCeramide)

M.F.: $C_{73}H_{131}N_3O_{31}$

M.W.: 1546.84

CAS No.: N/A

Package: mg to kg



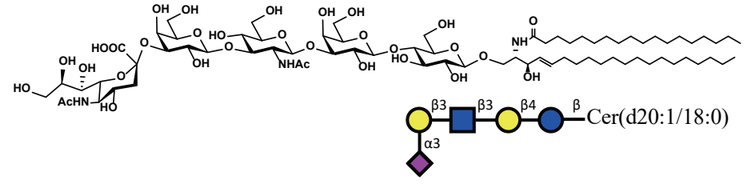
GL-2502 Sialyl-Lc4Cer d20:1/18:0 ((Neu5Aca2,3)Galb1,3GlcNAcb1,3Galb1,4GlcbCeramide)

M.F.: $C_{75}H_{135}N_3O_{31}$

M.W.: 1574.90

CAS No.: N/A

Package: mg to kg



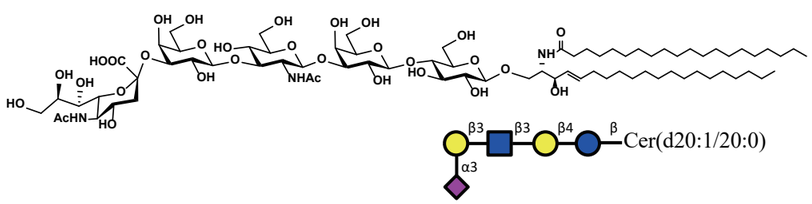
GL-2503 Sialyl-Lc4Cer d20:1/20:0 ((Neu5Aca2,3)Galb1,3GlcNAcb1,3Galb1,4GlcbCeramide)

M.F.: $C_{77}H_{139}N_3O_{31}$

M.W.: 1602.95

CAS No.: N/A

Package: mg to kg



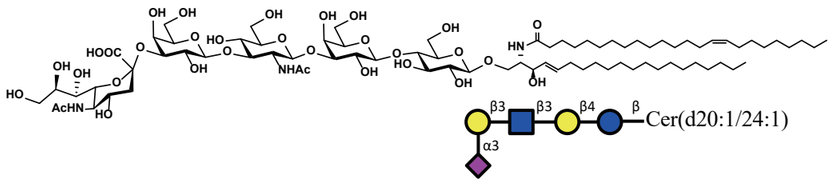
GL-2504 Sialyl-Lc4Cer d20:1/24:1 ((Neu5Aca2,3)Galb1,3GlcNAcb1,3Galb1,4GlcbCeramide)

M.F.: $C_{81}H_{145}N_3O_{31}$

M.W.: 1657.04

CAS No.: N/A

Package: mg to kg



Lewis[a]

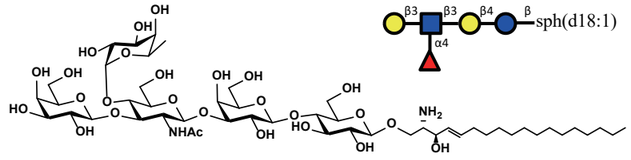
GL-0071 Lewis[a]sph d18:1 (Galb1,3(Fuca1,4)GlcNAcb1,3Galb1,4GlcbSphingosine)

M.F.: $C_{50}H_{90}N_2O_{26}$

M.W.: 1135.26

CAS No.: N/A

Package: mg to kg



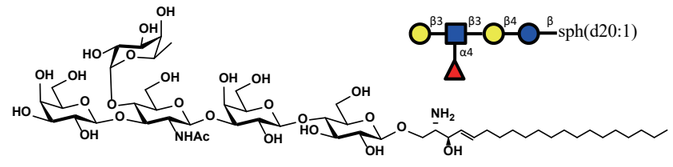
GL-0072 Lewis[a]sph d20:1 (Galb1,3(Fuca1,4)GlcNAcb1,3Galb1,4GlcbSphingosine)

M.F.: $C_{52}H_{94}N_2O_{26}$

M.W.: 1163.31

CAS No.: N/A

Package: mg to kg



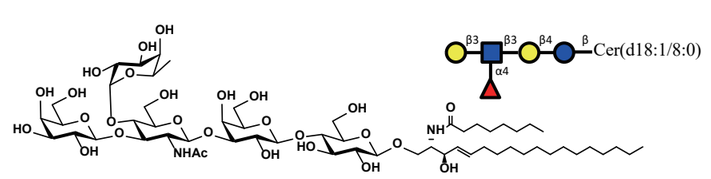
GL-2541 Lewis[a]Cer d18:1/8:0 (Galb1,3(Fuca1,4)GlcNAcb1,3Galb1,4GlcbCeramide)

M.F.: $C_{58}H_{104}N_2O_{27}$

M.W.: 1261.46

CAS No.: N/A

Package: mg to kg



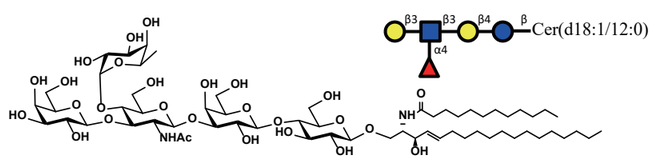
GL-2542 Lewis[a]Cer d18:1/12:0 (Galb1,3(Fuca1,4)GlcNAcb1,3Galb1,4GlcbCeramide)

M.F.: $C_{62}H_{112}N_2O_{27}$

M.W.: 1317.57

CAS No.: N/A

Package: mg to kg



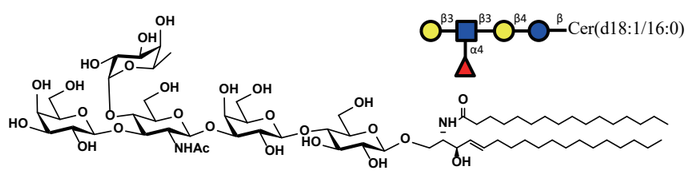
GL-2543 Lewis[a]Cer d18:1/16:0 (Galb1,3(Fuca1,4)GlcNAcb1,3Galb1,4GlcbCeramide)

M.F.: $C_{66}H_{120}N_2O_{27}$

M.W.: 1373.67

CAS No.: N/A

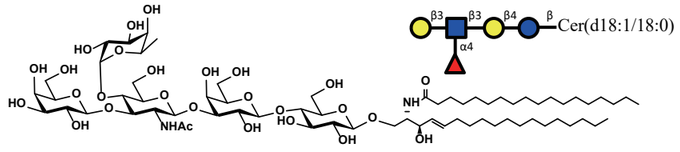
Package: mg to kg



Lewis^a

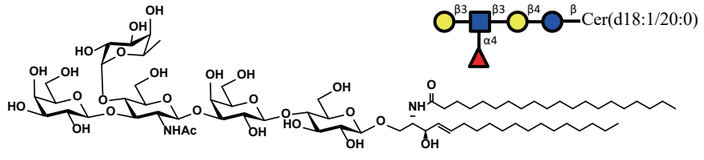
GL-2544 Lewis^{a}Cer d18:1/18:0 (Galb1,3(Fuca1,4)GlcNAcb1,3Galb1,4GlcbCeramide)

M.F.: $C_{68}H_{124}N_2O_{27}$
M.W.: 1401.73
CAS No.: N/A
Package: mg to kg



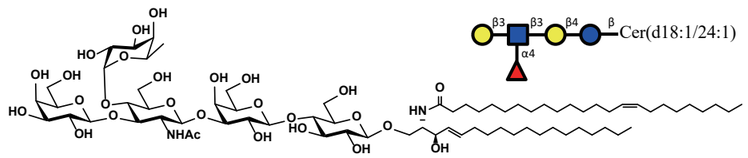
GL-2545 Lewis^{a}Cer d18:1/20:0 (Galb1,3(Fuca1,4)GlcNAcb1,3Galb1,4GlcbCeramide)

M.F.: $C_{70}H_{128}N_2O_{27}$
M.W.: 1429.78
CAS No.: N/A
Package: mg to kg



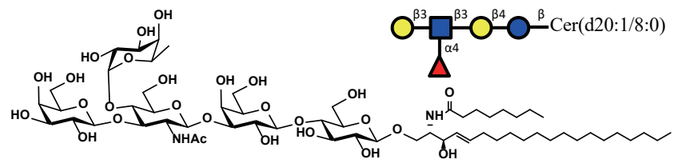
GL-2546 Lewis^{a}Cer d18:1/24:1 (Galb1,3(Fuca1,4)GlcNAcb1,3Galb1,4GlcbCeramide)

M.F.: $C_{74}H_{134}N_2O_{27}$
M.W.: 1483.87
CAS No.: N/A
Package: mg to kg



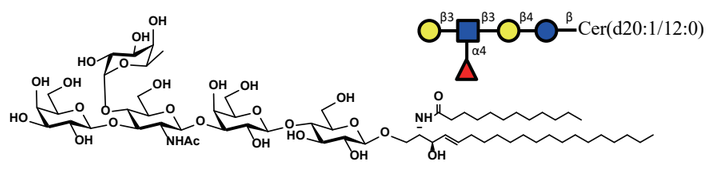
GL-2547 Lewis^{a}Cer d20:1/8:0 (Galb1,3(Fuca1,4)GlcNAcb1,3Galb1,4GlcbCeramide)

M.F.: $C_{60}H_{108}N_2O_{27}$
M.W.: 1289.51
CAS No.: N/A
Package: mg to kg



GL-2548 Lewis^{a}Cer d20:1/12:0 (Galb1,3(Fuca1,4)GlcNAcb1,3Galb1,4GlcbCeramide)

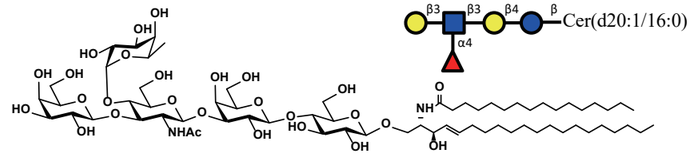
M.F.: $C_{64}H_{116}N_2O_{27}$
M.W.: 1345.62
CAS No.: N/A



Lewis^a

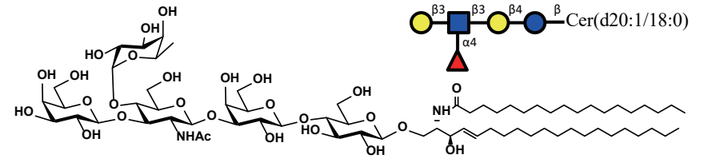
GL-2549 Lewis^{a}Cer d20:1/16:0 (Galb1,3(Fuca1,4)GlcNAcb1,3Galb1,4GlcbCeramide)

M.F.: $C_{68}H_{124}N_2O_{27}$
M.W.: 1401.73
CAS No.: N/A
Package: mg to kg



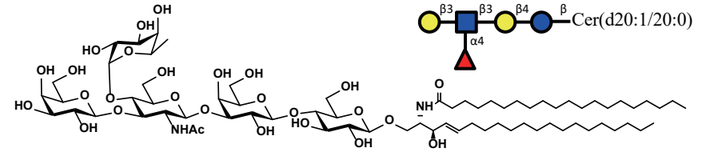
GL-2550 LewisaCer d20:1/18:0 (Galb1,3(Fuca1,4)GlcNAcb1,3Galb1,4GlcbCeramide)

M.F.: $C_{70}H_{128}N_2O_{27}$
M.W.: 1429.78
CAS No.: N/A
Package: mg to kg



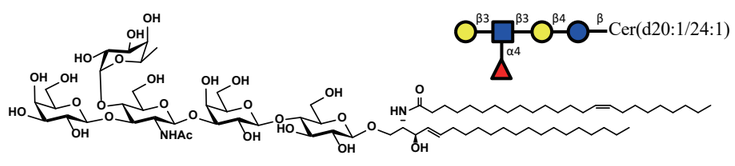
GL-2551 Lewis^{a}Cer d20:1/20:0 (Galb1,3(Fuca1,4)GlcNAcb1,3Galb1,4GlcbCeramide)

M.F.: $C_{72}H_{132}N_2O_{27}$
M.W.: 1457.84
CAS No.: N/A
Package: mg to kg



GL-2552 LewisaCer d20:1/24:1 (Galb1,3(Fuca1,4)GlcNAcb1,3Galb1,4GlcbCeramide)

M.F.: $C_{76}H_{138}N_2O_{27}$
M.W.: 1511.93
CAS No.: N/A
Package: mg to kg



nLc4

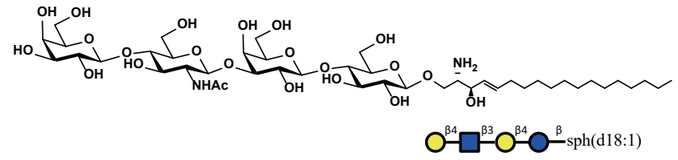
GL-0059 nLc4sph d18:1 (Galb1,4GlcNAcb1,3Galb1,4GlcbSphingosine)

M.F.: $C_{44}H_{80}N_2O_{22}$

M.W.: 989.12

CAS No.: N/A

Package: mg to kg



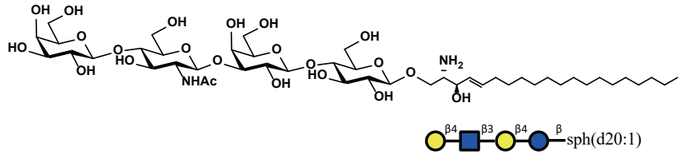
GL-0060 nLc4sph d20:1 (Galb1,4GlcNAcb1,3Galb1,4GlcbSphingosine)

M.F.: $C_{46}H_{84}N_2O_{22}$

M.W.: 1017.17

CAS No.: N/A

Package: mg to kg



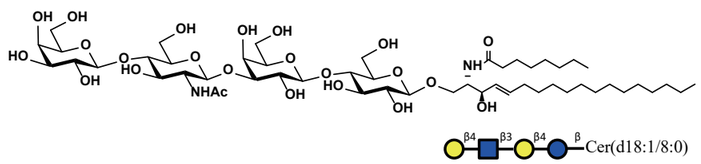
GL-2469 nLc4Cer d18:1/8:0 (Galb1,4GlcNAcb1,3Galb1,4GlcbCeramide)

M.F.: $C_{52}H_{94}N_2O_{23}$

M.W.: 1115.32

CAS No.: N/A

Package: mg to kg



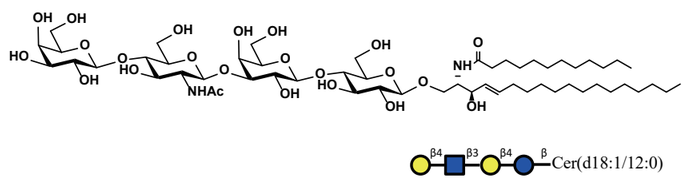
GL-2470 nLc4Cer d18:1/12:0 (Galb1,4GlcNAcb1,3Galb1,4GlcbCeramide)

M.F.: $C_{56}H_{102}N_2O_{23}$

M.W.: 1171.42

CAS No.: N/A

Package: mg to kg



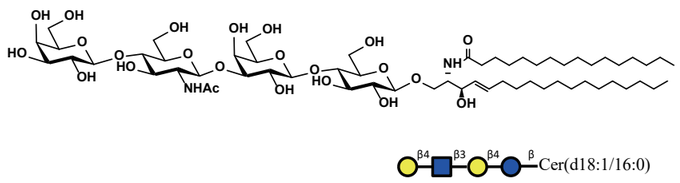
GL-2471 nLc4Cer d18:1/16:0 (Galb1,4GlcNAcb1,3Galb1,4GlcbCeramide)

M.F.: $C_{60}H_{110}N_2O_{23}$

M.W.: 1227.53

CAS No.: N/A

Package: mg to kg



nLc4

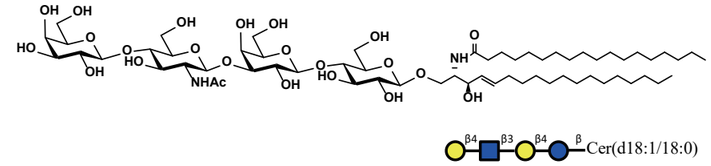
GL-2472 nLc4Cer d18:1/18:0 (Galb1,4GlcNAcb1,3Galb1,4GlcbCeramide)

M.F.: $C_{62}H_{114}N_2O_{23}$

M.W.: 1255.59

CAS No.: N/A

Package: mg to kg



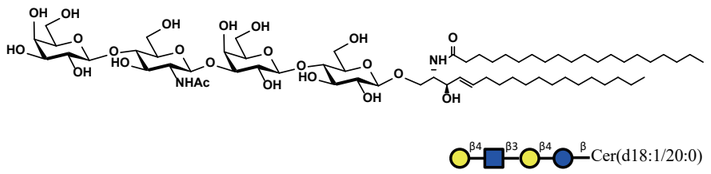
GL-2473 nLc4Cer d18:1/20:0 (Galb1,4GlcNAcb1,3Galb1,4GlcbCeramide)

M.F.: $C_{64}H_{118}N_2O_{23}$

M.W.: 1283.64

CAS No.: N/A

Package: mg to kg



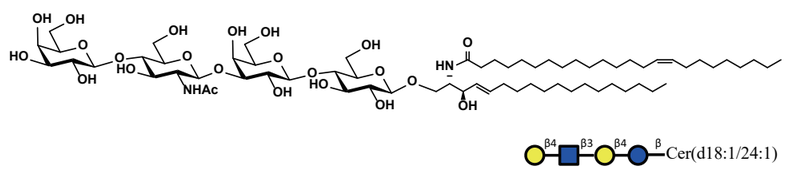
GL-2474 nLc4Cer d18:1/24:1 (Galb1,4GlcNAcb1,3Galb1,4GlcbCeramide)

M.F.: $C_{68}H_{124}N_2O_{23}$

M.W.: 1337.73

CAS No.: N/A

Package: mg to kg



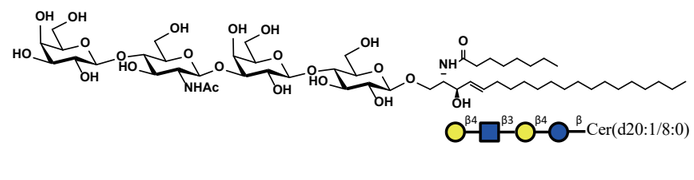
GL-2475 nLc4Cer d20:1/8:0 (Galb1,4GlcNAcb1,3Galb1,4GlcbCeramide)

M.F.: $C_{54}H_{98}N_2O_{23}$

M.W.: 1143.37

CAS No.: N/A

Package: mg to kg



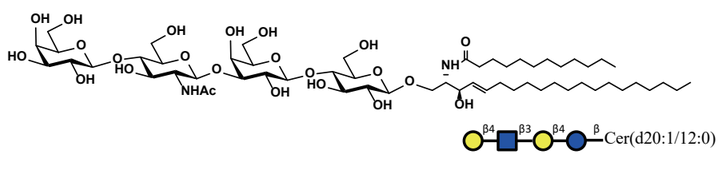
GL-2476 nLc4Cer d20:1/12:0 (Galb1,4GlcNAcb1,3Galb1,4GlcbCeramide)

M.F.: $C_{58}H_{106}N_2O_{23}$

M.W.: 1199.48

CAS No.: N/A

Package: mg to kg



nLc4

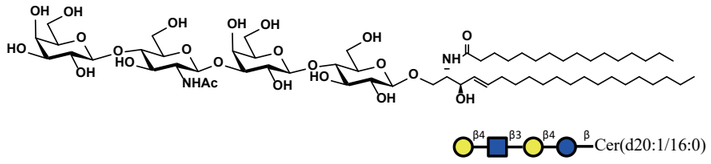
GL-2477 nLc4Cer d20:1/16:0 (Galb1,4GlcNAcb1,3Galb1,4GlcbCeramide)

M.F.: $C_{62}H_{114}N_2O_{23}$

M.W.: 1255.59

CAS No.: N/A

Package: mg to kg



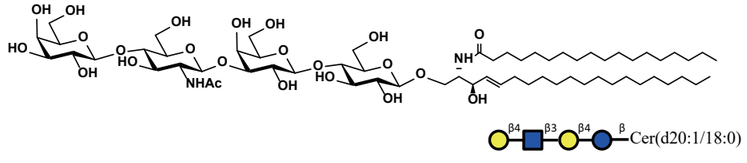
GL-2478 nLc4Cer d20:1/18:0 (Galb1,4GlcNAcb1,3Galb1,4GlcbCeramide)

M.F.: $C_{64}H_{118}N_2O_{23}$

M.W.: 1283.64

CAS No.: N/A

Package: mg to kg



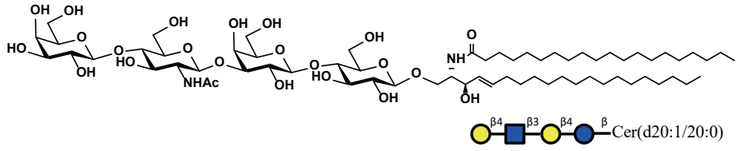
GL-2479 nLc4Cer d20:1/20:0 (Galb1,4GlcNAcb1,3Galb1,4GlcbCeramide)

M.F.: $C_{66}H_{122}N_2O_{23}$

M.W.: 1311.69

CAS No.: N/A

Package: mg to kg



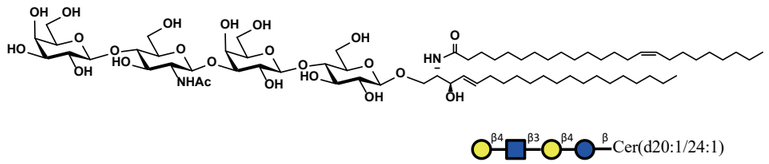
GL-2480 nLc4Cer d20:1/24:1 (Galb1,4GlcNAcb1,3Galb1,4GlcbCeramide)

M.F.: $C_{70}H_{128}N_2O_{23}$

M.W.: 1365.79

CAS No.: N/A

Package: mg to kg



Sialyl-nLc4

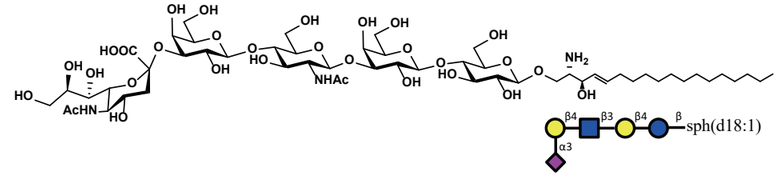
GL-0065 Sialyl-nLc4sph d18:1 ((Neu5Aca2,3)Galb1,4GlcNAcb1,3Galb1,4GlcbSphingosine)

M.F.: $C_{55}H_{97}N_3O_{30}$

M.W.: 1280.37

CAS No.: N/A

Package: mg to kg



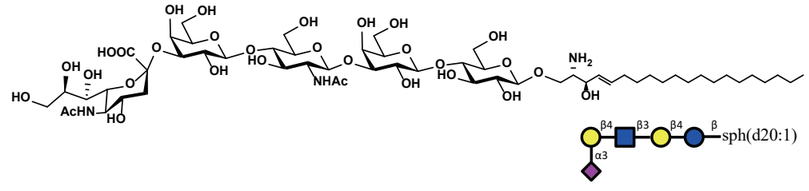
GL-0066 Sialyl-nLc4sph d20:1 ((Neu5Aca2,3)Galb1,4GlcNAcb1,3Galb1,4GlcbSphingosine)

M.F.: $C_{57}H_{101}N_3O_{30}$

M.W.: 1308.43

CAS No.: N/A

Package: mg to kg



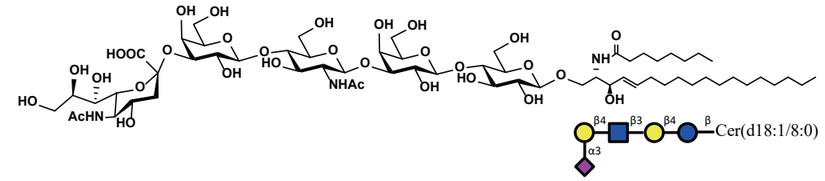
GL-2505 Sialyl-nLc4Cer d18:1/8:0 ((Neu5Aca2,3)Galb1,4GlcNAcb1,3Galb1,4GlcbCeramide)

M.F.: $C_{63}H_{111}N_3O_{31}$

M.W.: 1406.57

CAS No.: N/A

Package: mg to kg



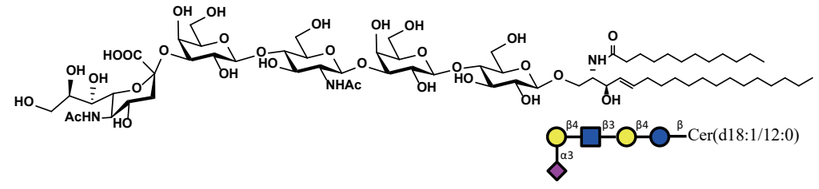
GL-2506 Sialyl-nLc4Cer d18:1/12:0 ((Neu5Aca2,3)Galb1,4GlcNAcb1,3Galb1,4GlcbCeramide)

M.F.: $C_{67}H_{119}N_3O_{31}$

M.W.: 1462.68

CAS No.: N/A

Package: mg to kg



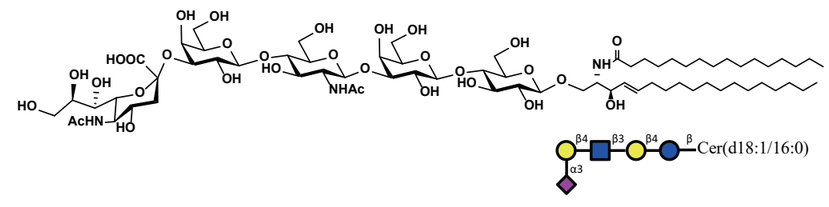
GL-2507 Sialyl-nLc4Cer d18:1/16:0 ((Neu5Aca2,3)Galb1,4GlcNAcb1,3Galb1,4GlcbCeramide)

M.F.: $C_{71}H_{127}N_3O_{31}$

M.W.: 1518.79

CAS No.: N/A

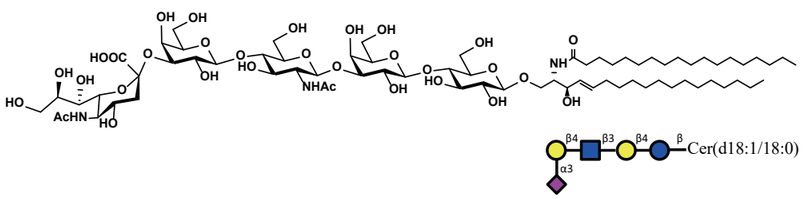
Package: mg to kg



Sialyl-nLc4

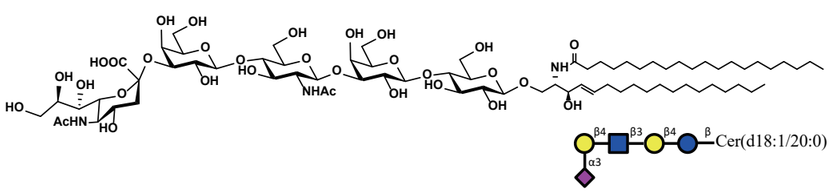
GL-2508 Sialyl-nLc4Cer d18:1/18:0 ((Neu5Aca2,3)Galb1,4GlcNAcb1,3Galb1,4GlcbCeramide)

M.F.: $C_{73}H_{131}N_3O_{31}$
M.W.: 1546.84
CAS No.: N/A
Package: mg to kg



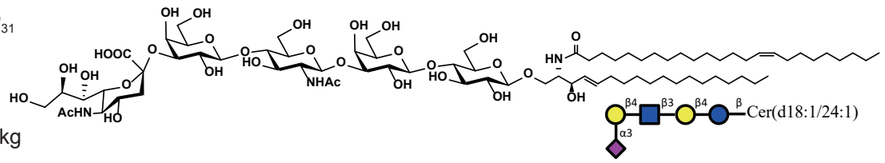
GL-2509 Sialyl-nLc4Cer d18:1/20:0 ((Neu5Aca2,3)Galb1,4GlcNAcb1,3Galb1,4GlcbCeramide)

M.F.: $C_{75}H_{135}N_3O_{31}$
M.W.: 1574.90
CAS No.: N/A
Package: mg to kg



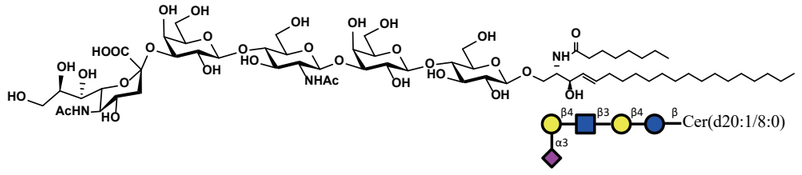
GL-2510 Sialyl-nLc4Cer d18:1/24:1 ((Neu5Aca2,3)Galb1,4GlcNAcb1,3Galb1,4GlcbCeramide)

M.F.: $C_{79}H_{141}N_3O_{31}$
M.W.: 1628.99
CAS No.: N/A
Package: mg to kg



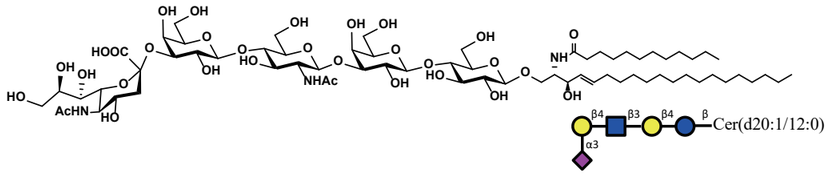
GL-2511 Sialyl-nLc4Cer d20:1/8:0 ((Neu5Aca2,3)Galb1,4GlcNAcb1,3Galb1,4GlcbCeramide)

M.F.: $C_{65}H_{115}N_3O_{31}$
M.W.: 1434.63
CAS No.: N/A
Package: mg to kg



GL-2512 Sialyl-nLc4Cer d20:1/12:0 ((Neu5Aca2,3)Galb1,4GlcNAcb1,3Galb1,4GlcbCeramide)

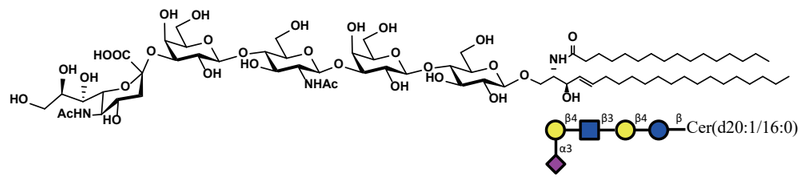
M.F.: $C_{69}H_{123}N_3O_{31}$
M.W.: 1490.73
CAS No.: N/A
Package: mg to kg



Sialyl-nLc4

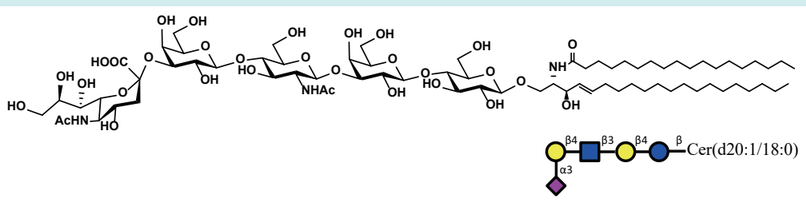
GL-2513 Sialyl-nLc4Cer d20:1/16:0 ((Neu5Aca2,3)Galb1,4GlcNAcb1,3Galb1,4GlcbCeramide)

M.F.: $C_{73}H_{131}N_3O_{31}$
M.W.: 1546.84
CAS No.: N/A
Package: mg to kg



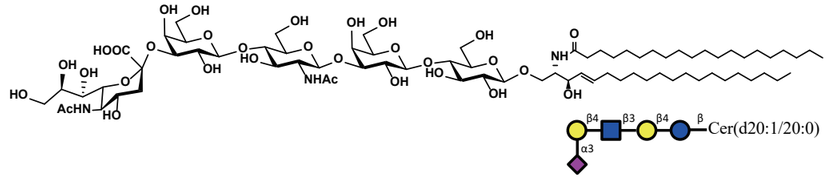
GL-2514 Sialyl-nLc4Cer d20:1/18:0 ((Neu5Aca2,3)Galb1,4GlcNAcb1,3Galb1,4GlcbCeramide)

M.F.: $C_{75}H_{135}N_3O_{31}$
M.W.: 1574.90
CAS No.: N/A
Package: mg to kg



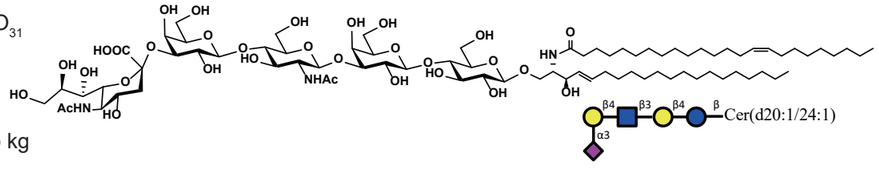
GL-2515 Sialyl-nLc4Cer d20:1/20:0 ((Neu5Aca2,3)Galb1,4GlcNAcb1,3Galb1,4GlcbCeramide)

M.F.: $C_{77}H_{139}N_3O_{31}$
M.W.: 1602.95
CAS No.: N/A
Package: mg to kg



GL-2516 Sialyl-nLc4Cer d20:1/24:1 ((Neu5Aca2,3)Galb1,4GlcNAcb1,3Galb1,4GlcbCeramide)

M.F.: $C_{81}H_{145}N_3O_{31}$
M.W.: 1657.04
CAS No.: N/A
Package: mg to kg



H Antigen

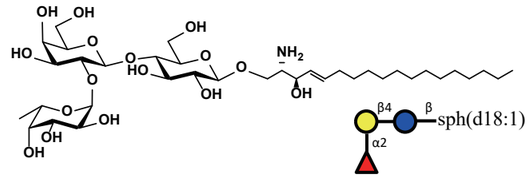
GL-0051 H Antigensph d18:1 ((Fuca1,2)Galb1,4GlcbSphingosine)

M.F.: $C_{36}H_{67}NO_{16}$

M.W.: 769.92

CAS No.: N/A

Package: mg to kg



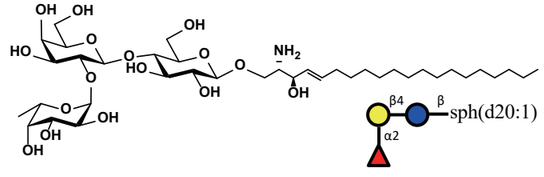
GL-0052 H Antigensph d20:1 ((Fuca1,2)Galb1,4GlcbSphingosine)

M.F.: $C_{38}H_{71}NO_{16}$

M.W.: 797.98

CAS No.: N/A

Package: mg to kg



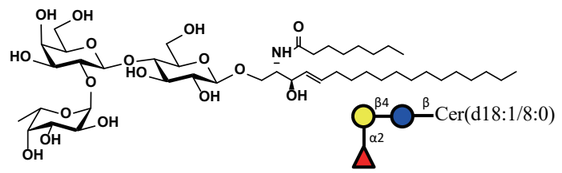
GL-2421 H AntigenCer d18:1/8:0 ((Fuca1,2)Galb1,4GlcbCeramide)

M.F.: $C_{44}H_{81}NO_{17}$

M.W.: 896.12

CAS No.: N/A

Package: mg to kg



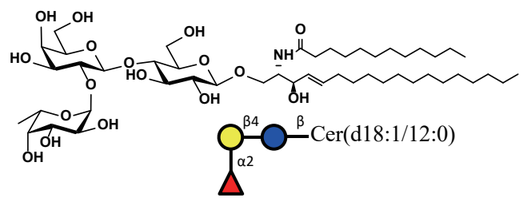
GL-2422 H AntigenCer d18:1/12:0 ((Fuca1,2)Galb1,4GlcbCeramide)

M.F.: $C_{48}H_{89}NO_{17}$

M.W.: 952.23

CAS No.: N/A

Package: mg to kg



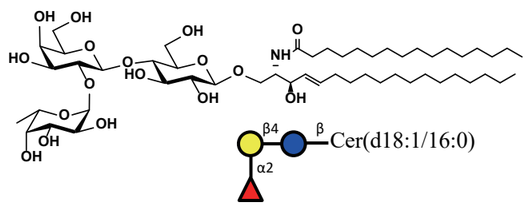
GL-2423 H AntigenCer d18:1/16:0 ((Fuca1,2)Galb1,4GlcbCeramide)

M.F.: $C_{52}H_{97}NO_{17}$

M.W.: 1008.34

CAS No.: N/A

Package: mg to kg



H Antigen

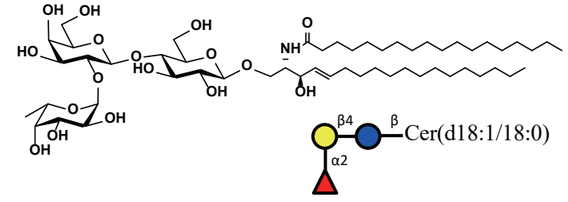
GL-2424 H AntigenCer d18:1/18:0 ((Fuca1,2)Galb1,4GlcbCeramide)

M.F.: $C_{54}H_{101}NO_{17}$

M.W.: 1036.39

CAS No.: N/A

Package: mg to kg



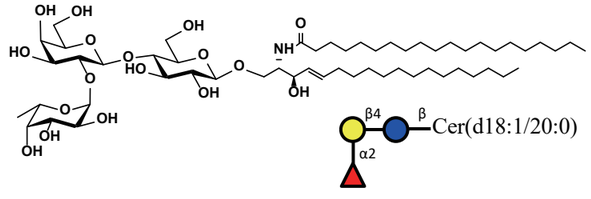
GL-2425 H AntigenCer d18:1/20:0 ((Fuca1,2)Galb1,4GlcbCeramide)

M.F.: $C_{56}H_{105}NO_{17}$

M.W.: 1064.45

CAS No.: N/A

Package: mg to kg



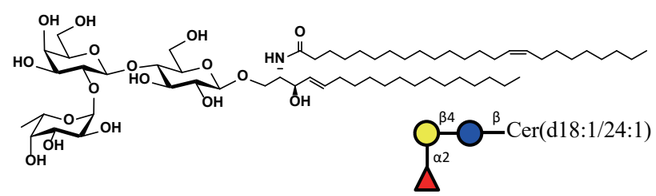
GL-2426 H AntigenCer d18:1/24:1 ((Fuca1,2)Galb1,4GlcbCeramide)

M.F.: $C_{60}H_{111}NO_{17}$

M.W.: 1118.54

CAS No.: N/A

Package: mg to kg



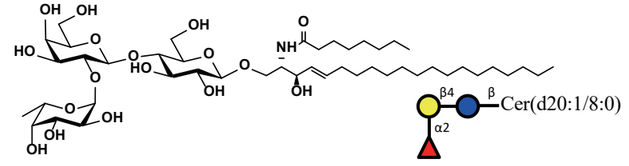
GL-2427 H AntigenCer d20:1/8:0 ((Fuca1,2)Galb1,4GlcbCeramide)

M.F.: $C_{46}H_{85}NO_{17}$

M.W.: 924.18

CAS No.: N/A

Package: mg to kg



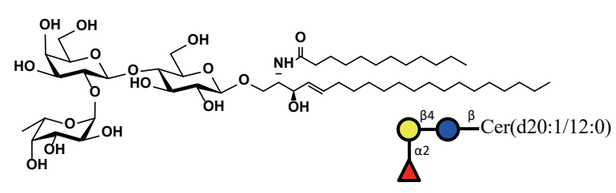
GL-2428 H AntigenCer d20:1/12:0 ((Fuca1,2)Galb1,4GlcbCeramide)

M.F.: $C_{50}H_{93}NO_{17}$

M.W.: 980.28

CAS No.: N/A

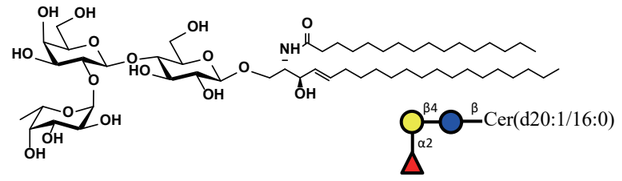
Package: mg to kg



H Antigen

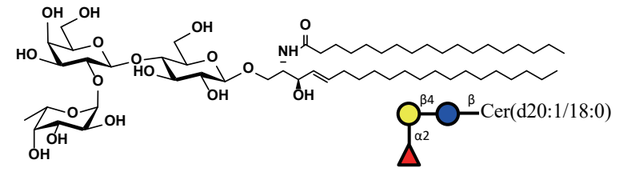
GL-2429 H AntigenCer d20:1/16:0 ((Fuca1,2)Galb1,4GlcbCeramide)

M.F.: $C_{54}H_{101}NO_{17}$
M.W.: 1036.39
CAS No.: N/A
Package: mg to kg



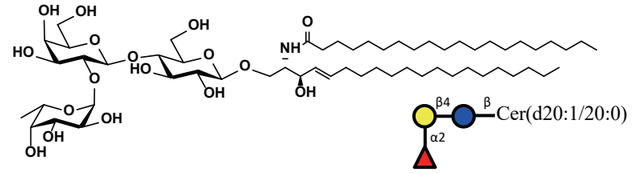
GL-2430 H AntigenCer d20:1/18:0 ((Fuca1,2)Galb1,4GlcbCeramide)

M.F.: $C_{56}H_{105}NO_{17}$
M.W.: 1064.45
CAS No.: N/A
Package: mg to kg



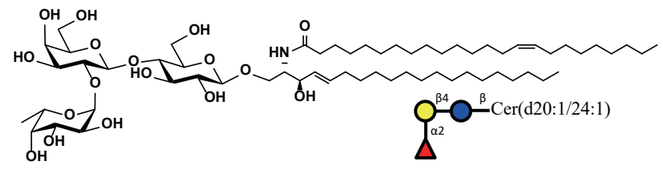
GL-2431 H AntigenCer d20:1/20:0 ((Fuca1,2)Galb1,4GlcbCeramide)

M.F.: $C_{58}H_{109}NO_{17}$
M.W.: 1092.50
CAS No.: N/A
Package: mg to kg



GL-2432 H AntigenCer d20:1/24:1 ((Fuca1,2)Galb1,4GlcbCeramide)

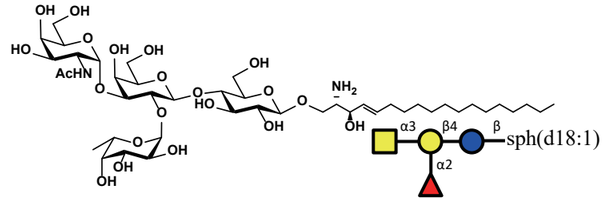
M.F.: $C_{62}H_{115}NO_{17}$
M.W.: 1146.59
CAS No.: N/A
Package: mg to kg



A Antigen

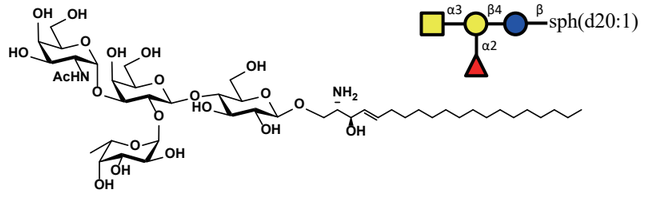
GL-0053 A Antigensph d18:1 (GalNAca1,3(Fuca1,2)Galb1,4GlcbSphingosine)

M.F.: $C_{44}H_{80}N_2O_{21}$
M.W.: 973.12
CAS No.: N/A
Package: mg to kg



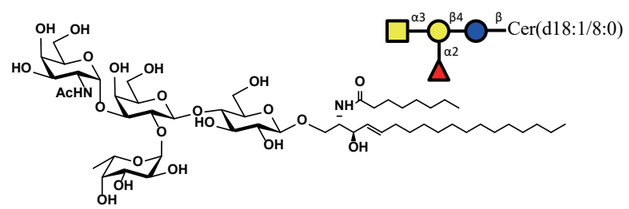
GL-0054 A Antigensph d20:1 (GalNAca1,3(Fuca1,2)Galb1,4GlcbSphingosine)

M.F.: $C_{46}H_{84}N_2O_{21}$
M.W.: 1001.17
CAS No.: N/A
Package: mg to kg



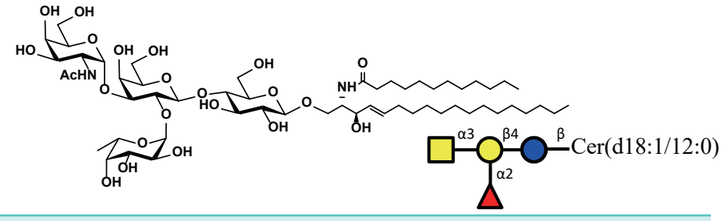
GL-2433 A AntigenCer d18:1/8:0 (GalNAca1,3(Fuca1,2)Galb1,4GlcbCeramide)

M.F.: $C_{52}H_{94}N_2O_{22}$
M.W.: 1099.32
CAS No.: N/A
Package: mg to kg



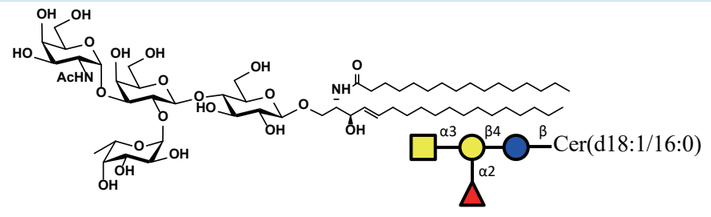
GL-2434 A AntigenCer d18:1/12:0 (GalNAca1,3(Fuca1,2)Galb1,4GlcbCeramide)

M.F.: $C_{56}H_{102}N_2O_{22}$
M.W.: 1155.42
CAS No.: N/A
Package: mg to kg



GL-2435 A AntigenCer d18:1/16:0 (GalNAca1,3(Fuca1,2)Galb1,4GlcbCeramide)

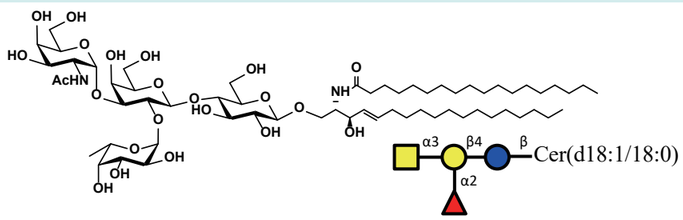
M.F.: $C_{60}H_{110}N_2O_{22}$
M.W.: 1211.53
CAS No.: N/A
Package: mg to kg



A Antigen

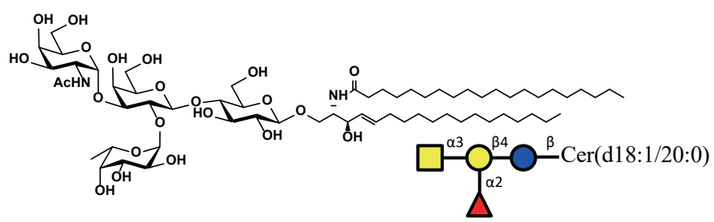
GL-2436 A AntigenCer d18:1/18:0 (GalNAca1,3(Fuca1,2)Galb1,4GlcbCeramide)

M.F.: $C_{62}H_{114}N_2O_{22}$
M.W.: 1239.59
CAS No.: N/A
Package: mg to kg



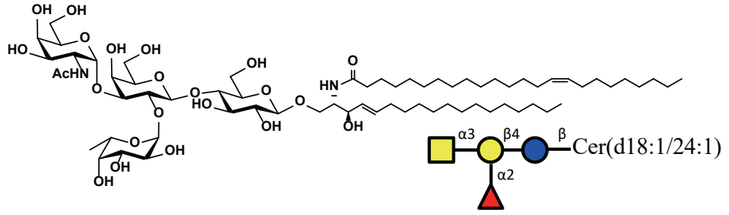
GL-2437 A AntigenCer d18:1/20:0 (GalNAca1,3(Fuca1,2)Galb1,4GlcbCeramide)

M.F.: $C_{64}H_{118}N_2O_{22}$
M.W.: 1267.64
CAS No.: N/A
Package: mg to kg



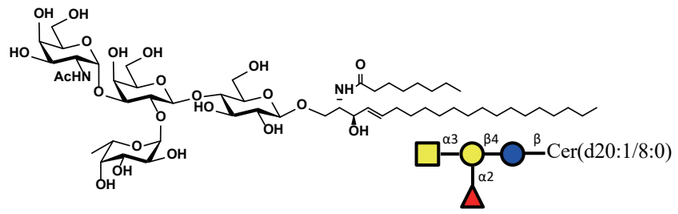
GL-2438 A AntigenCer d18:1/24:1 (GalNAca1,3(Fuca1,2)Galb1,4GlcbCeramide)

M.F.: $C_{68}H_{124}N_2O_{22}$
M.W.: 1321.73
CAS No.: N/A
Package: mg to kg



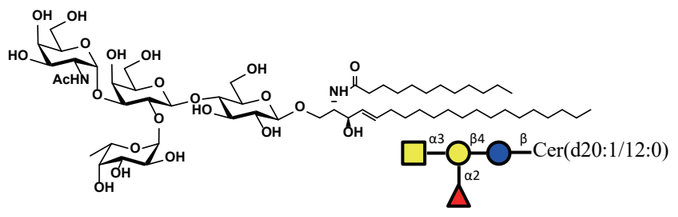
GL-2439 A AntigenCer d20:1/8:0 (GalNAca1,3(Fuca1,2)Galb1,4GlcbCeramide)

M.F.: $C_{54}H_{98}N_2O_{22}$
M.W.: 1127.37
CAS No.: N/A
Package: mg to kg



GL-2440 A AntigenCer d20:1/12:0 (GalNAca1,3(Fuca1,2)Galb1,4GlcbCeramide)

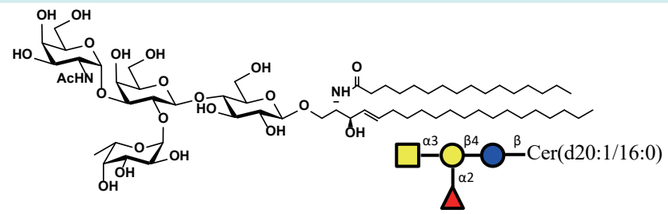
M.F.: $C_{58}H_{106}N_2O_{22}$
M.W.: 1183.48
CAS No.: N/A
Package: mg to kg



A Antigen

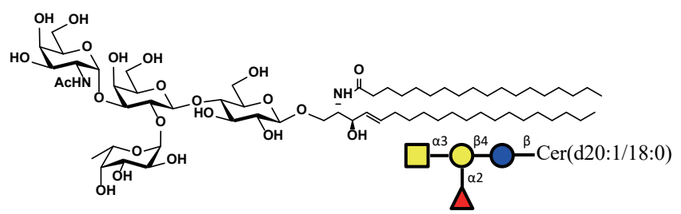
GL-2441 A AntigenCer d20:1/16:0 (GalNAca1,3(Fuca1,2)Galb1,4GlcbCeramide)

M.F.: $C_{62}H_{114}N_2O_{22}$
M.W.: 1239.59
CAS No.: N/A
Package: mg to kg



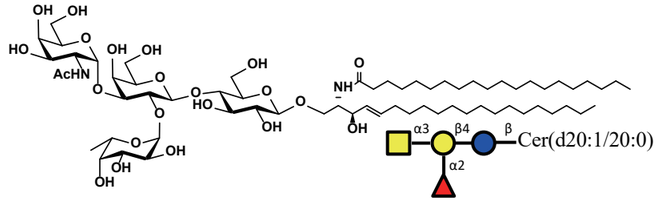
GL-2442 A AntigenCer d20:1/18:0 (GalNAca1,3(Fuca1,2)Galb1,4GlcbCeramide)

M.F.: $C_{64}H_{118}N_2O_{22}$
M.W.: 1267.64
CAS No.: N/A
Package: mg to kg



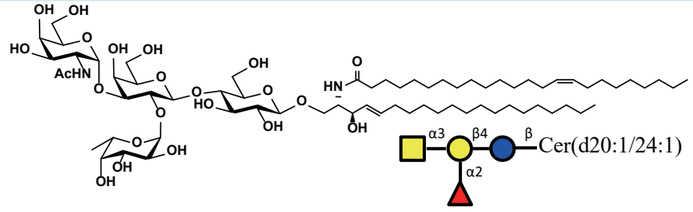
GL-2443 A AntigenCer d20:1/20:0 (GalNAca1,3(Fuca1,2)Galb1,4GlcbCeramide)

M.F.: $C_{66}H_{122}N_2O_{22}$
M.W.: 1295.69
CAS No.: N/A
Package: mg to kg



GL-2444 A AntigenCer d20:1/24:1 (GalNAca1,3(Fuca1,2)Galb1,4GlcbCeramide)

M.F.: $C_{70}H_{128}N_2O_{22}$
M.W.: 1349.79
CAS No.: N/A
Package: mg to kg



B Antigen

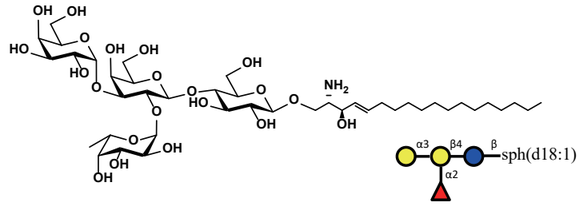
GL-0055 B Antigensph d18:1 (Gala1,3(Fuca1,2)Galb1,4GlcbSphingosine)

M.F.: $C_{42}H_{77}NO_{21}$

M.W.: 932.06

CAS No.: N/A

Package: mg to kg



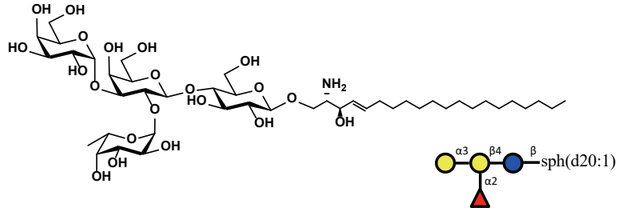
GL-0056 B Antigensph d20:1 (Gala1,3(Fuca1,2)Galb1,4GlcbSphingosine)

M.F.: $C_{44}H_{81}NO_{21}$

M.W.: 960.12

CAS No.: N/A

Package: mg to kg



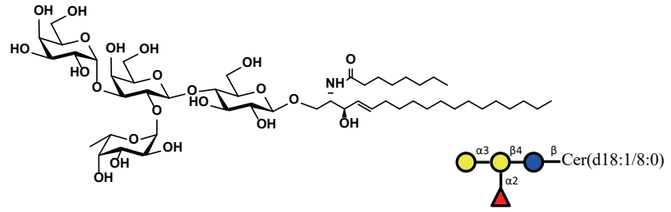
GL-2445 B AntigenCer d18:1/8:0 (Gala1,3(Fuca1,2)Galb1,4GlcbCeramide)

M.F.: $C_{50}H_{91}NO_{22}$

M.W.: 1058.26

CAS No.: N/A

Package: mg to kg



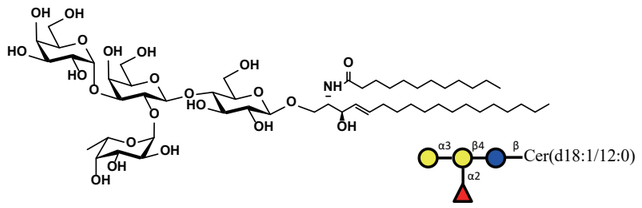
GL-2446 B AntigenCer d18:1/12:0 (Gala1,3(Fuca1,2)Galb1,4GlcbCeramide)

M.F.: $C_{54}H_{99}NO_{22}$

M.W.: 1114.37

CAS No.: N/A

Package: mg to kg



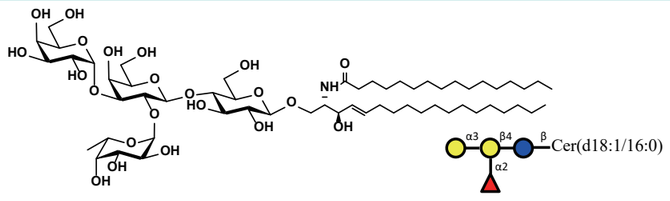
GL-2447 B AntigenCer d18:1/16:0 (Gala1,3(Fuca1,2)Galb1,4GlcbCeramide)

M.F.: $C_{58}H_{107}NO_{22}$

M.W.: 1170.48

CAS No.: N/A

Package: mg to kg



B Antigen

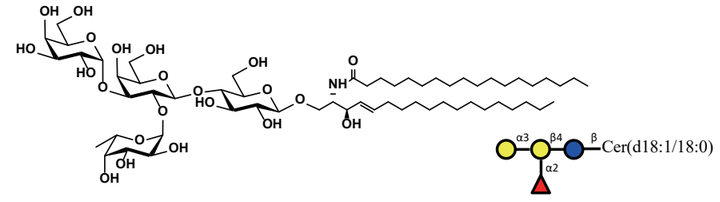
GL-2448 B AntigenCer d18:1/18:0 (Gala1,3(Fuca1,2)Galb1,4GlcbCeramide)

M.F.: $C_{60}H_{111}NO_{22}$

M.W.: 1198.53

CAS No.: N/A

Package: mg to kg



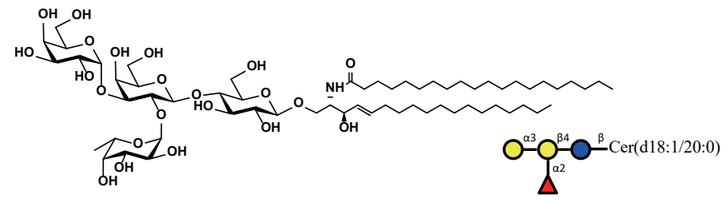
GL-2449 B AntigenCer d18:1/20:0 (Gala1,3(Fuca1,2)Galb1,4GlcbCeramide)

M.F.: $C_{62}H_{115}NO_{22}$

M.W.: 1226.59

CAS No.: N/A

Package: mg to kg



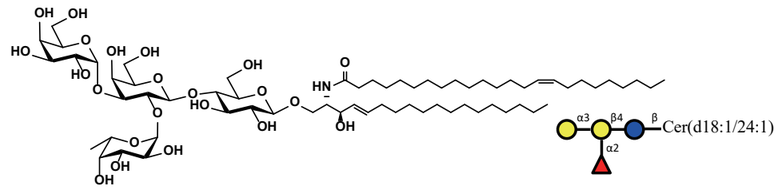
GL-2450 B Antigen Cer d18:1/24:1 (Gala1,3(Fuca1,2)Galb1,4GlcbCeramide)

M.F.: $C_{66}H_{121}NO_{22}$

M.W.: 1280.68

CAS No.: N/A

Package: mg to kg



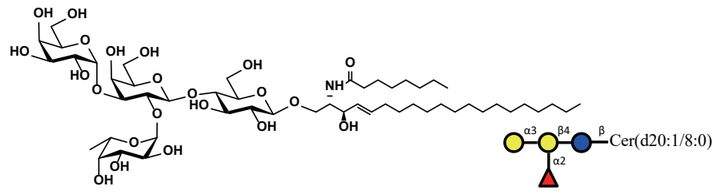
GL-2451 B AntigenCer d20:1/8:0 (Gala1,3(Fuca1,2)Galb1,4GlcbCeramide)

M.F.: $C_{52}H_{95}NO_{22}$

M.W.: 1086.32

CAS No.: N/A

Package: mg to kg



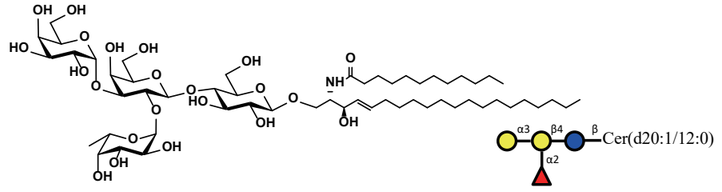
GL-2452 B AntigenCer d20:1/12:0 (Gala1,3(Fuca1,2)Galb1,4GlcbCeramide)

M.F.: $C_{56}H_{103}NO_{22}$

M.W.: 1142.43

CAS No.: N/A

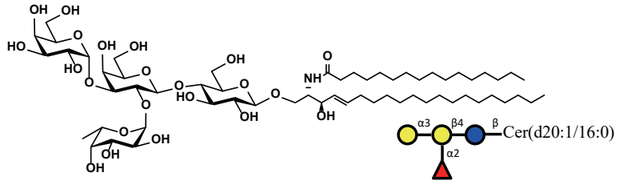
Package: mg to kg



B Antigen

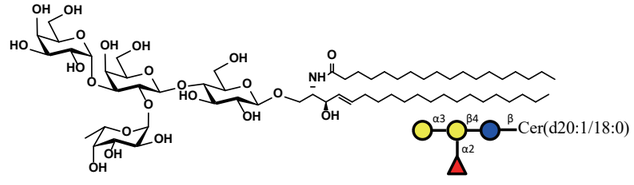
GL-2453 B AntigenCer d20:1/16:0 (Gala1,3(Fuca1,2)Galb1,4GlcbCeramide)

M.F.: $C_{60}H_{111}NO_{22}$
M.W.: 1198.53
CAS No.: N/A
Package: mg to kg



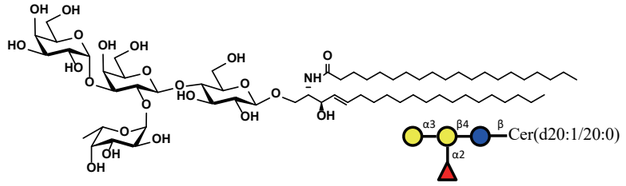
GL-2454 B AntigenCer d20:1/18:0 (Gala1,3(Fuca1,2)Galb1,4GlcbCeramide)

M.F.: $C_{62}H_{115}NO_{22}$
M.W.: 1226.59
CAS No.: N/A
Package: mg to kg



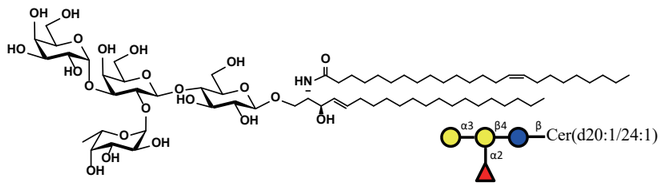
GL-2455 B AntigenCer d20:1/20:0 (Gala1,3(Fuca1,2)Galb1,4GlcbCeramide)

M.F.: $C_{64}H_{119}NO_{22}$
M.W.: 1254.64
CAS No.: N/A
Package: mg to kg



GL-2456 B AntigenCer d20:1/24:1 (Gala1,3(Fuca1,2)Galb1,4GlcbCeramide)

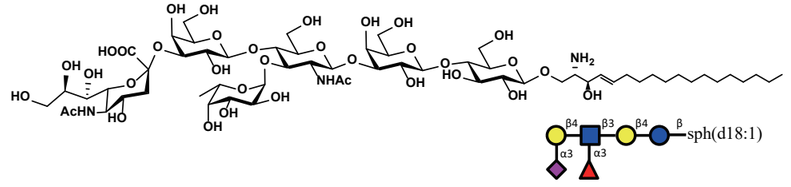
M.F.: $C_{68}H_{125}NO_{22}$
M.W.: 1308.73
CAS No.: N/A
Package: mg to kg



Sialyl-Lewis^x

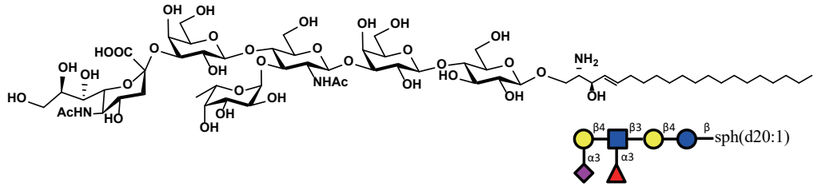
GL-0067 Sialyl-Lewisxsph d18:1 ((Neu5Aca2,3)Galb1,4(Fuca1,3)GlcNAcb1,3Galb1,4GlcbSphingosine)

M.F.: $C_{61}H_{107}N_3O_{34}$
M.W.: 1426.51
CAS No.: N/A
Package: mg to kg



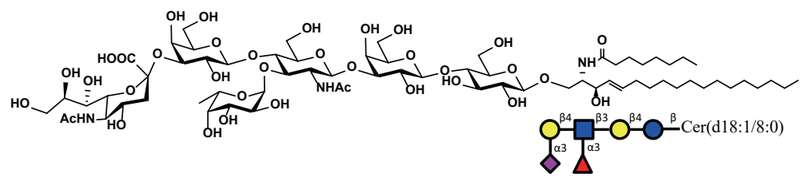
GL-0068 Sialyl-Lewisxsph d20:1 ((Neu5Aca2,3)Galb1,4(Fuca1,3)GlcNAcb1,3Galb1,4GlcbSphingosine)

M.F.: $C_{63}H_{111}N_3O_{34}$
M.W.: 1454.57
CAS No.: N/A
Package: mg to kg



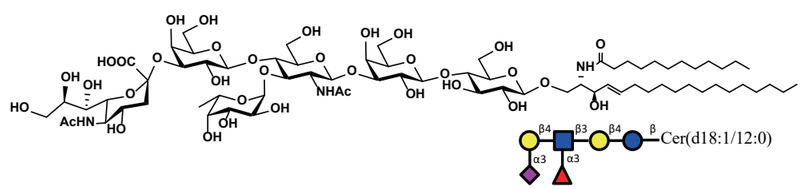
GL-2517 Sialyl-LewisxCer d18:1/8:0 ((Neu5Aca2,3)Galb1,4(Fuca1,3)GlcNAcb1,3Galb1,4GlcbCeramide)

M.F.: $C_{69}H_{121}N_3O_{35}$
M.W.: 1552.71
CAS No.: N/A
Package: mg to kg



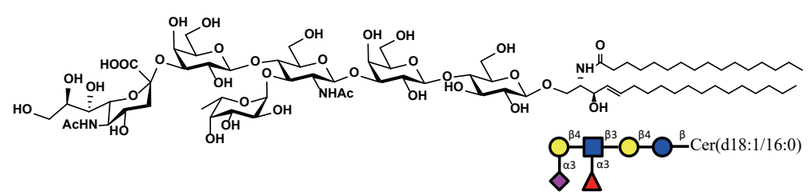
GL-2518 Sialyl-LewisxCer d18:1/12:0 ((Neu5Aca2,3)Galb1,4(Fuca1,3)GlcNAcb1,3Galb1,4GlcbCeramide)

M.F.: $C_{73}H_{129}N_3O_{35}$
M.W.: 1608.82
CAS No.: N/A
Package: mg to kg



GL-2519 Sialyl-LewisxCer d18:1/16:0 ((Neu5Aca2,3)Galb1,4(Fuca1,3)GlcNAcb1,3Galb1,4GlcbCeramide)

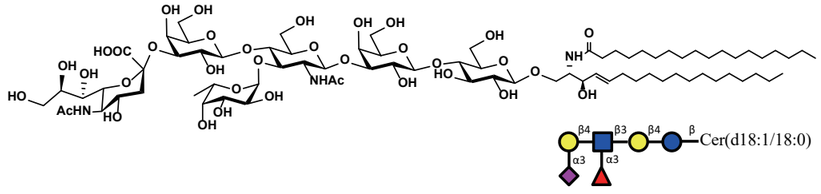
M.F.: $C_{77}H_{137}N_3O_{35}$
M.W.: 1664.93
CAS NO.: N/A
Package: mg to kg



Sialyl-Lewis^x

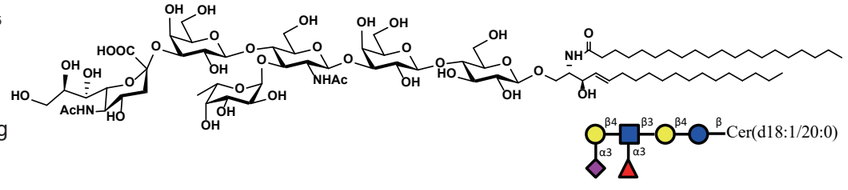
GL-2520 Sialyl-LewisxCer d18:1/18:0 ((Neu5Aca2,3)Galb1,4(Fuca1,3)GlcNAcb1,3Galb1,4GlcbCeramide)

M.F.: $C_{79}H_{141}N_3O_{35}$
M.W.: 1692.98
CAS No.: N/A
Package: mg to kg



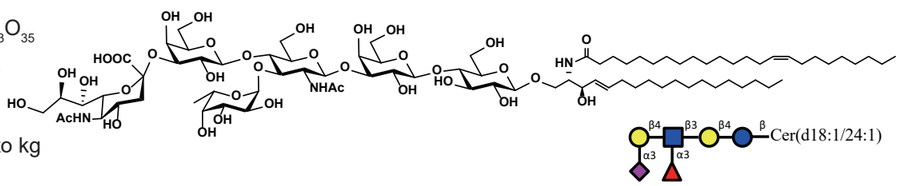
GL-2521 Sialyl-LewisxCer d18:1/20:0 ((Neu5Aca2,3)Galb1,4(Fuca1,3)GlcNAcb1,3Galb1,4GlcbCeramide)

M.F.: $C_{81}H_{145}N_3O_{35}$
M.W.: 1721.04
CAS No.: N/A
Package: mg to kg



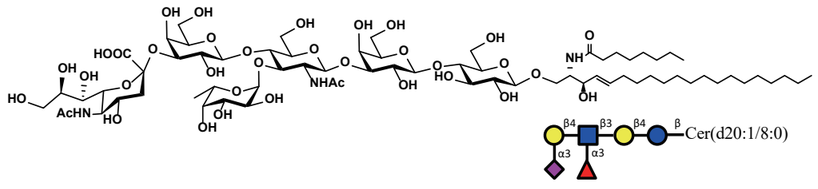
GL-2522 Sialyl-LewisxCer d18:1/24:1 ((Neu5Aca2,3)Galb1,4(Fuca1,3)GlcNAcb1,3Galb1,4GlcbCeramide)

M.F.: $C_{85}H_{151}N_3O_{35}$
M.W.: 1775.13
CAS No.: N/A
Package: mg to kg



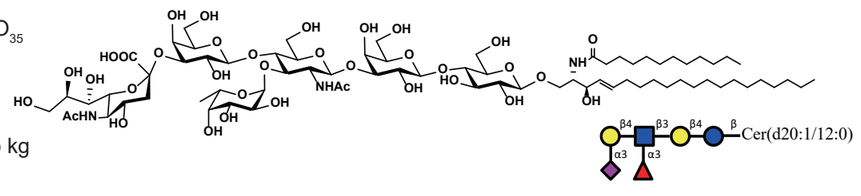
GL-2523 Sialyl-LewisxCer d20:1/8:0 ((Neu5Aca2,3)Galb1,4(Fuca1,3)GlcNAcb1,3Galb1,4GlcbCeramide)

M.F.: $C_{71}H_{125}N_3O_{35}$
M.W.: 1580.77
CAS No.: N/A
Package: mg to kg



GL-2524 Sialyl-LewisxCer d20:1/12:0 ((Neu5Aca2,3)Galb1,4(Fuca1,3)GlcNAcb1,3Galb1,4GlcbCeramide)

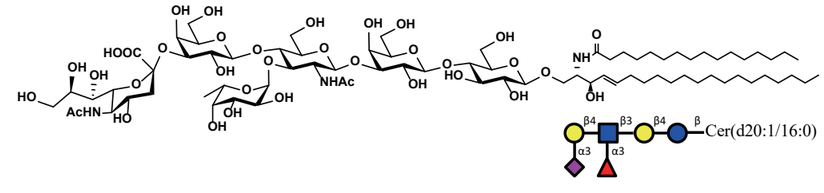
M.F.: $C_{75}H_{133}N_3O_{35}$
M.W.: 1636.88
CAS No.: N/A
Package: mg to kg



Sialyl-Lewis^x

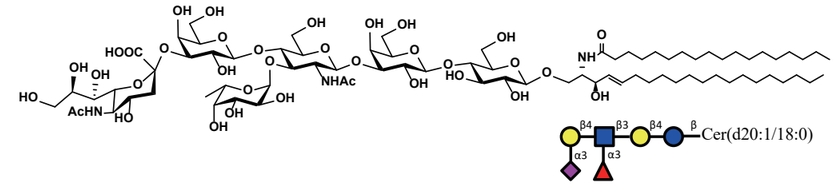
GL-2525 Sialyl-LewisxCer d20:1/16:0 ((Neu5Aca2,3)Galb1,4(Fuca1,3)GlcNAcb1,3Galb1,4GlcbCeramide)

M.F.: $C_{79}H_{141}N_3O_{35}$
M.W.: 1692.98
CAS No.: N/A
Package: mg to kg



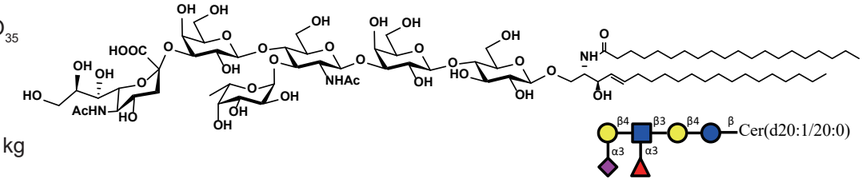
GL-2526 Sialyl-LewisxCer d20:1/18:0 ((Neu5Aca2,3)Galb1,4(Fuca1,3)GlcNAcb1,3Galb1,4GlcbCeramide)

M.F.: $C_{81}H_{145}N_3O_{35}$
M.W.: 1721.04
CAS No.: N/A
Package: mg to kg



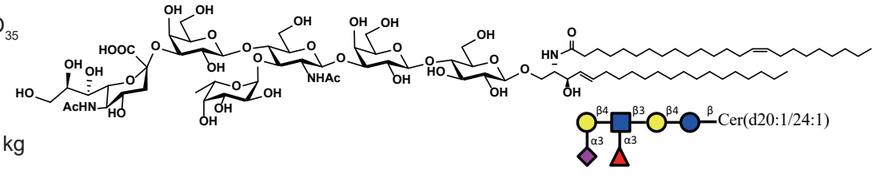
GL-2527 Sialyl-LewisxCer d20:1/20:0 ((Neu5Aca2,3)Galb1,4(Fuca1,3)GlcNAcb1,3Galb1,4GlcbCeramide)

M.F.: $C_{83}H_{149}N_3O_{35}$
M.W.: 1749.09
CAS No.: N/A
Package: mg to kg



GL-2528 Sialyl-LewisxCer d20:1/24:1 ((Neu5Aca2,3)Galb1,4(Fuca1,3)GlcNAcb1,3Galb1,4GlcbCeramide)

M.F.: $C_{87}H_{155}N_3O_{35}$
M.W.: 1803.18
CAS No.: N/A
Package: mg to kg



Lewis^x

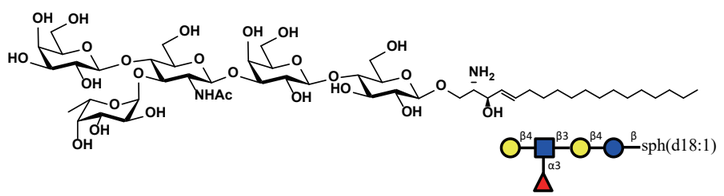
GL-0069 Lewis^{x}sph d18:1 (Galb1,4(Fuca1,3)GlcNAcb1,3Galb1,4GlcbSphingosine)

M.F.: $C_{50}H_{90}N_2O_{26}$

M.W.: 1135.26

CAS No.: N/A

Package: mg to kg



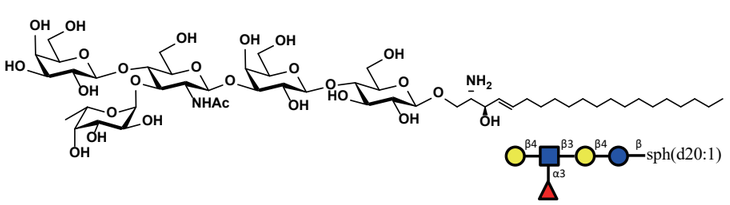
GL-0070 Lewis^{x}sph d20:1 (Galb1,4(Fuca1,3)GlcNAcb1,3Galb1,4GlcbSphingosine)

M.F.: $C_{52}H_{94}N_2O_{26}$

M.W.: 1163.31

CAS No.: N/A

Package: mg to kg



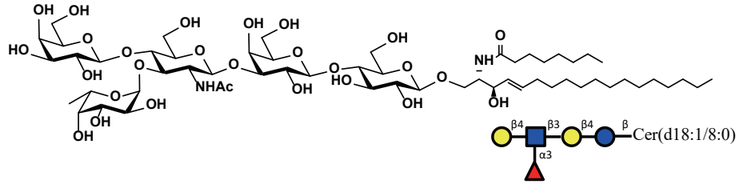
GL-2529 Lewis^{x}Cer d18:1/8:0 (Galb1,4(Fuca1,3)GlcNAcb1,3Galb1,4GlcbCeramide)

M.F.: $C_{58}H_{104}N_2O_{27}$

M.W.: 1261.46

CAS No.: N/A

Package: mg to kg



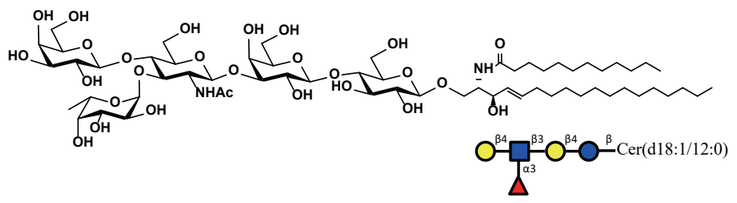
GL-2530 Lewis^{x}Cer d18:1/12:0 (Galb1,4(Fuca1,3)GlcNAcb1,3Galb1,4GlcbCeramide)

M.F.: $C_{62}H_{112}N_2O_{27}$

M.W.: 1317.57

CAS No.: N/A

Package: mg to kg



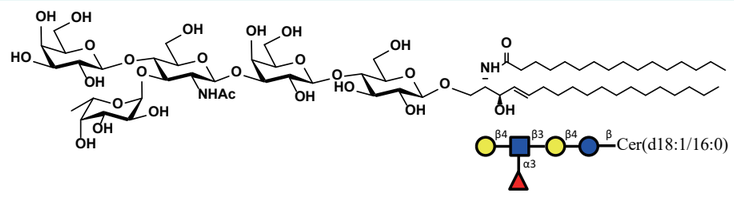
GL-2531 Lewis^{x}Cer d18:1/16:0 (Galb1,4(Fuca1,3)GlcNAcb1,3Galb1,4GlcbCeramide)

M.F.: $C_{66}H_{120}N_2O_{27}$

M.W.: 1373.67

CAS No.: N/A

Package: mg to kg



Lewis^x

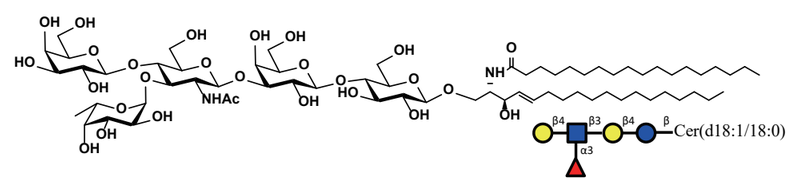
GL-2532 Lewis^{x}Cer d18:1/18:0 (Galb1,4(Fuca1,3)GlcNAcb1,3Galb1,4GlcbCeramide)

M.F.: $C_{68}H_{124}N_2O_{27}$

M.W.: 1401.73

CAS No.: N/A

Package: mg to kg



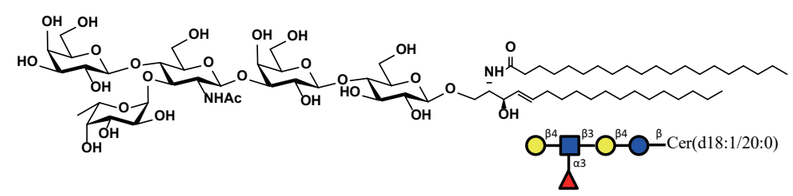
GL-2533 Lewis^{x}Cer d18:1/20:0 (Galb1,4(Fuca1,3)GlcNAcb1,3Galb1,4GlcbCeramide)

M.F.: $C_{70}H_{128}N_2O_{27}$

M.W.: 1429.78

CAS No.: N/A

Package: mg to kg



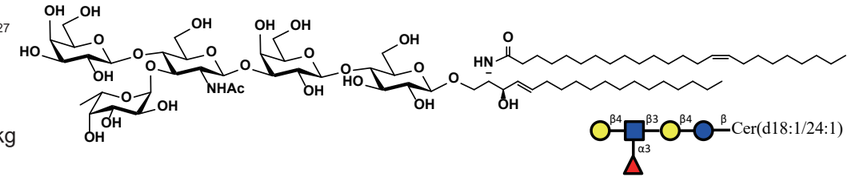
GL-2534 Lewis^{x}Cer d18:1/24:1 (Galb1,4(Fuca1,3)GlcNAcb1,3Galb1,4GlcbCeramide)

M.F.: $C_{74}H_{134}N_2O_{27}$

M.W.: 1483.87

CAS No.: N/A

Package: mg to kg



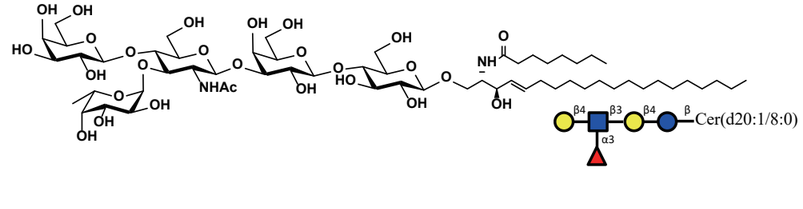
GL-2535 Lewis^{x}Cer d20:1/8:0 (Galb1,4(Fuca1,3)GlcNAcb1,3Galb1,4GlcbCeramide)

M.F.: $C_{60}H_{108}N_2O_{27}$

M.W.: 1289.51

CAS No.: N/A

Package: mg to kg



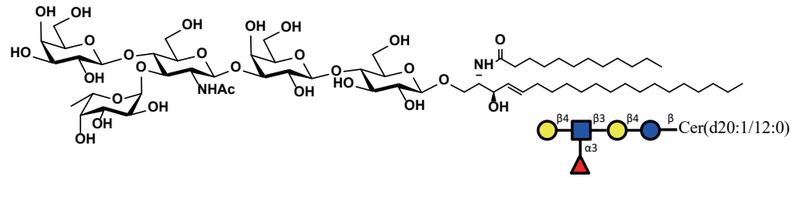
GL-2536 Lewis^{x}Cer d20:1/12:0 (Galb1,4(Fuca1,3)GlcNAcb1,3Galb1,4GlcbCeramide)

M.F.: $C_{64}H_{116}N_2O_{27}$

M.W.: 1345.62

CAS No.: N/A

Package: mg to kg



Lewis^x

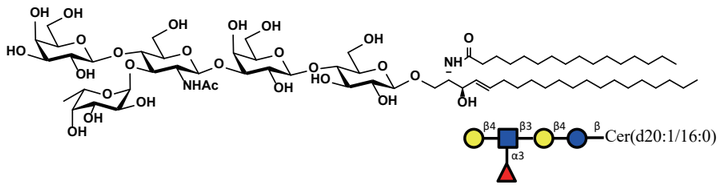
GL-2537 Lewis^{x}Cer d20:1/16:0 (Galb1,4(Fuca1,3)GlcNAcb1,3Galb1,4GlcbCeramide)

M.F.: $C_{68}H_{124}N_2O_{27}$

M.W.: 1401.73

CAS No.: N/A

Package: mg to kg



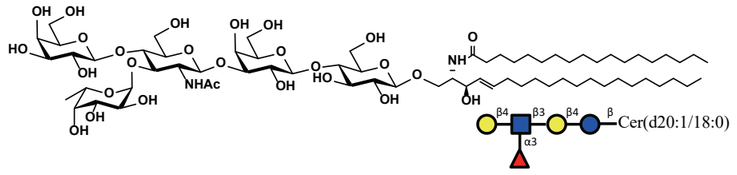
GL-2538 Lewis^{x}Cer d20:1/18:0 (Galb1,4(Fuca1,3)GlcNAcb1,3Galb1,4GlcbCeramide)

M.F.: $C_{70}H_{128}N_2O_{27}$

M.W.: 1429.78

CAS No.: N/A

Package: mg to kg



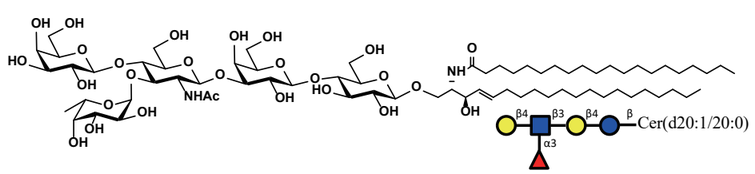
GL-2539 Lewis^{x}Cer d20:1/20:0 (Galb1,4(Fuca1,3)GlcNAcb1,3Galb1,4GlcbCeramide)

M.F.: $C_{72}H_{132}N_2O_{27}$

M.W.: 1457.84

CAS No.: N/A

Package: mg to kg



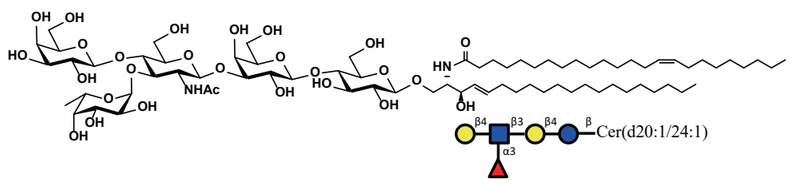
GL-2540 Lewis^{x}Cer d20:1/24:1 (Galb1,4(Fuca1,3)GlcNAcb1,3Galb1,4GlcbCeramide)

M.F.: $C_{76}H_{138}N_2O_{27}$

M.W.: 1511.93

CAS No.: N/A

Package: mg to kg



Globo series

Globo series glycolipids are neutral and originally isolated from human erythrocytes. Erythrocyte glycolipids inhibit neurite formation in human glioma cells and have been identified as receptors for human parvovirus B19V.

Reference:
[*] Zhang Jian, et al Journal of the First Military Medical University, 2000
[**] Bnsch C, et al.. Journal of Virology, 2010, 84(22):11737-11746.

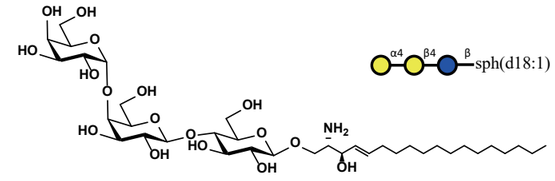
GL-0031 GB3sph d18:1 (Gala1,4Galb1,4GlcbSphingosine)

M.F.: $C_{36}H_{67}NO_{17}$

M.W.: 785.92

CAS No.: N/A

Package: mg to kg



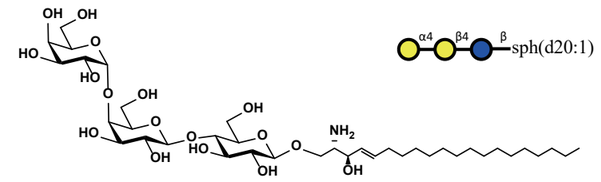
GL-0032 GB3sph d20:1 (Gala1,4Galb1,4GlcbSphingosine)

M.F.: $C_{38}H_{71}NO_{17}$

M.W.: 813.98

CAS No.: N/A

Package: mg to kg



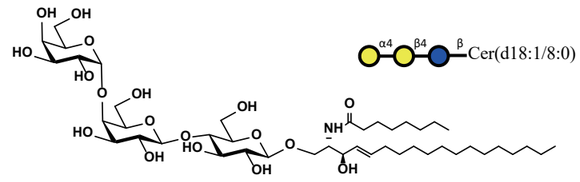
GL-2301 GB3Cer d18:1/8:0 (Gala1,4Galb1,4GlcbCeramide)

M.F.: $C_{44}H_{81}NO_{18}$

M.W.: 912.12

CAS No.: N/A

Package: mg to kg



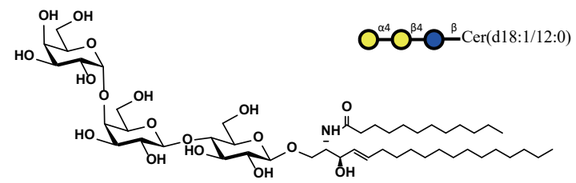
GL-2302 GB3Cer d18:1/12:0 (Gala1,4Galb1,4GlcbCeramide)

M.F.: $C_{48}H_{89}NO_{18}$

M.W.: 968.23

CAS No.: N/A

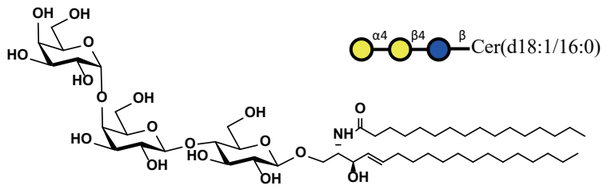
Package: mg to kg



Red blood cell glycoside series (GB3)

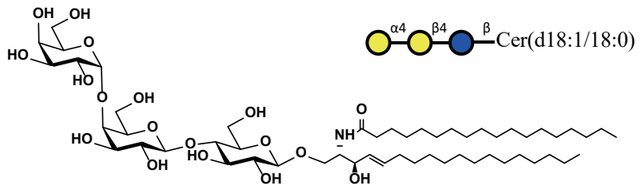
GL-2303 GB3Cer d18:1/16:0 (Gala1,4Galb1,4GlcbCeramide)

M.F.: $C_{52}H_{97}NO_{18}$
M.W.: 1024.34
CAS No.: N/A
Package: mg to kg



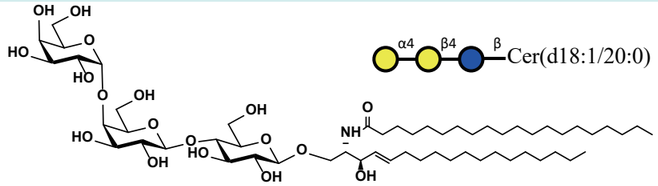
GL-2304 GB3Cer d18:1/18:0 (Gala1,4Galb1,4GlcbCeramide)

M.F.: $C_{54}H_{101}NO_{18}$
M.W.: 1052.39
CAS No.: N/A
Package: mg to kg



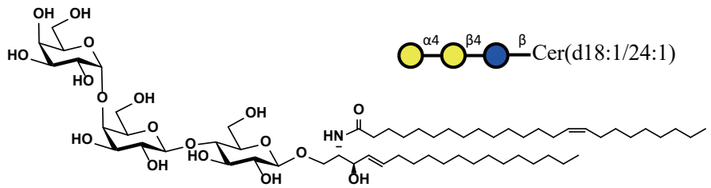
GL-2305 GB3Cer d18:1/20:0 (Gala1,4Galb1,4GlcbCeramide)

M.F.: $C_{56}H_{105}NO_{18}$
M.W.: 1080.45
CAS No.: N/A
Package: mg to kg



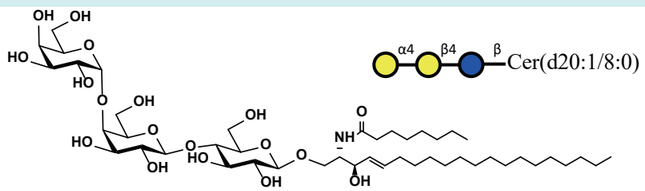
GL-2306 GB3Cer d18:1/24:1 (Gala1,4Galb1,4GlcbCeramide)

M.F.: $C_{60}H_{111}NO_{18}$
M.W.: 1134.54
CAS No.: N/A
Package: mg to kg



GL-2307 GB3Cer d20:1/8:0 (Gala1,4Galb1,4GlcbCeramide)

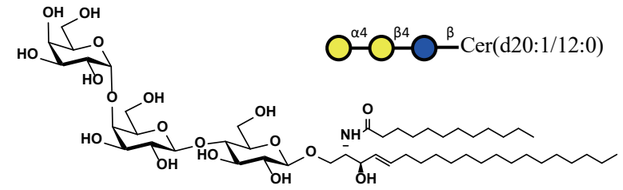
M.F.: $C_{46}H_{85}NO_{18}$
M.W.: 940.18
CAS No.: N/A
Package: mg to kg



Red blood cell glycoside series (GB3)

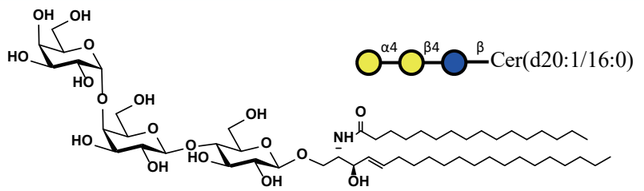
GL-2308 GB3Cer d20:1/12:0 (Gala1,4Galb1,4GlcbCeramide)

M.F.: $C_{50}H_{93}NO_{18}$
M.W.: 996.28
CAS No.: N/A
Package: mg , g



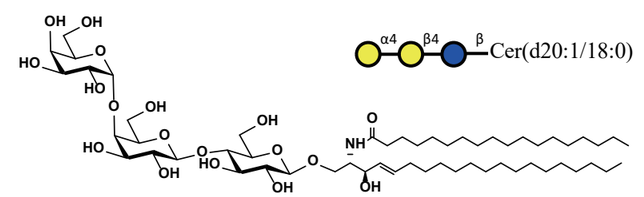
GL-2309 GB3Cer d20:1/16:0 (Gala1,4Galb1,4GlcbCeramide)

M.F.: $C_{54}H_{101}NO_{18}$
M.W.: 1052.39
CAS No.: N/A
Package: mg , g



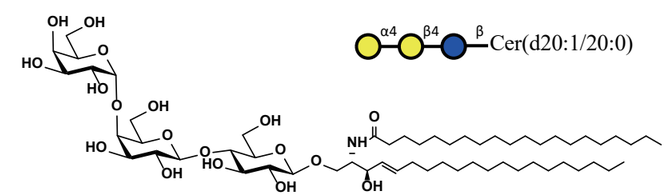
GL-2310 GB3Cer d20:1/18:0 (Gala1,4Galb1,4GlcbCeramide)

M.F.: $C_{56}H_{105}NO_{18}$
M.W.: 1080.45
CAS No.: N/A
Package: mg to kg



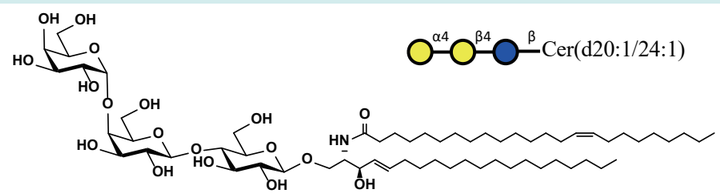
GL-2311 GB3Cer d20:1/20:0 (Gala1,4Galb1,4GlcbCeramide)

M.F.: $C_{58}H_{109}NO_{18}$
M.W.: 1108.50
CAS No.: N/A
Package: mg to kg



GL-2312 GB3Cer d20:1/24:1 (Gala1,4Galb1,4GlcbCeramide)

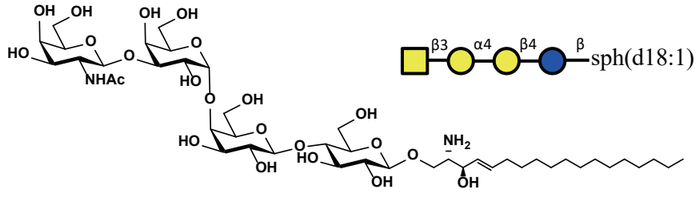
M.F.: $C_{62}H_{115}NO_{18}$
M.W.: 1162.59
CAS No.: N/A
Package: mg to kg



Red blood cell glycoside series (GB4)

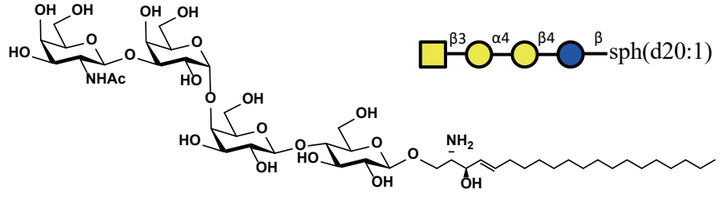
GL-0033 GB4sph d18:1 (GalNAcb1,3Gala1,4Galb1,4GlcbSphingosine)

M.F.: $C_{44}H_{80}N_2O_{22}$
M.W.: 989.12
CAS No.: N/A
Package: mg to kg



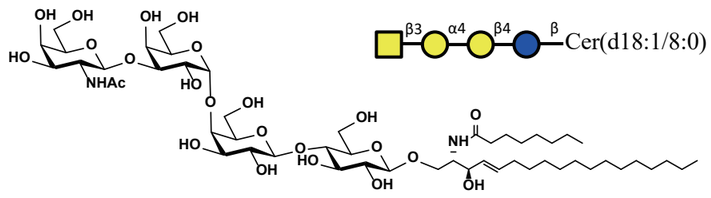
GL-0034 GB4sph d20:1 (GalNAcb1,3Gala1,4Galb1,4GlcbSphingosine)

M.F.: $C_{46}H_{84}N_2O_{22}$
M.W.: 1017.17
CAS No.: N/A
Package: mg to kg



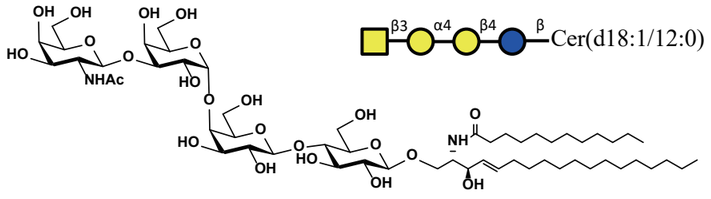
GL-2313 GB4Cer d18:1/8:0 (GalNAcb1,3Gala1,4Galb1,4GlcbCeramide)

M.F.: $C_{52}H_{94}N_2O_{23}$
M.W.: 1115.32
CAS No.: N/A
Package: mg to kg



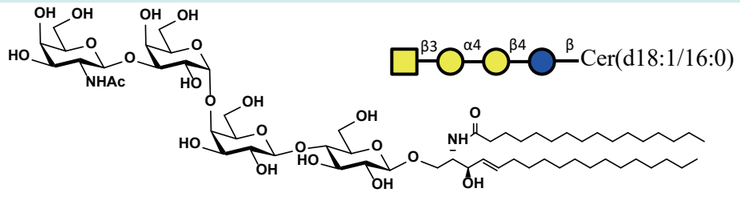
GL-2314 GB4Cer d18:1/12:0 (GalNAcb1,3Gala1,4Galb1,4GlcbCeramide)

M.F.: $C_{56}H_{102}N_2O_{23}$
M.W.: 1171.42
CAS No.: N/A
Package: mg , g



GL-2315 GB4Cer d18:1/16:0 (GalNAcb1,3Gala1,4Galb1,4GlcbCeramide)

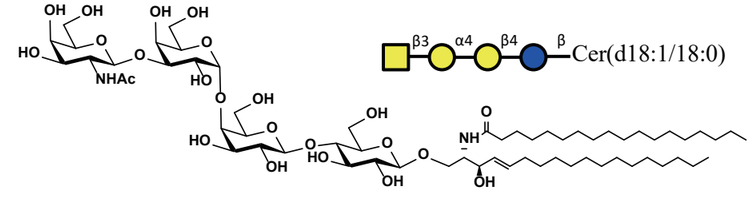
M.F.: $C_{60}H_{110}N_2O_{23}$
M.W.: 1227.53
CAS No.: N/A
Package: mg , g



Red blood cell glycoside series (GB4)

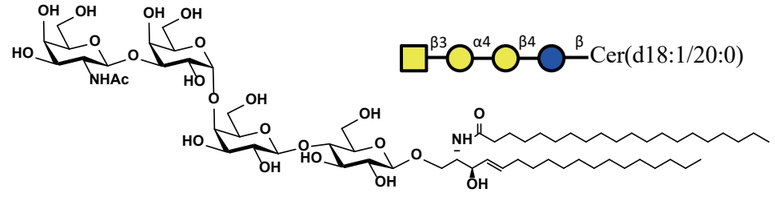
GL-2316 GB4Cer d18:1/18:0 (GalNAcb1,3Gala1,4Galb1,4GlcbCeramide)

M.F.: $C_{62}H_{114}N_2O_{23}$
M.W.: 1255.59
CAS No.: N/A
Package: mg to kg



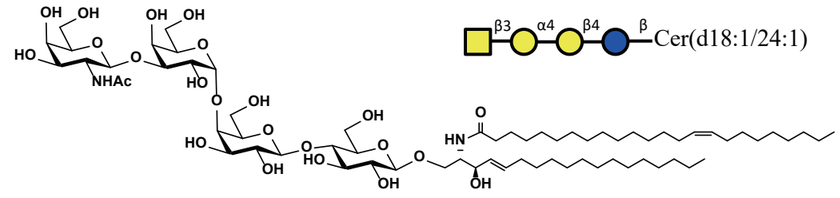
GL-2317 GB4Cer d18:1/20:0 (GalNAcb1,3Gala1,4Galb1,4GlcbCeramide)

M.F.: $C_{64}H_{118}N_2O_{23}$
M.W.: 1283.64
CAS No.: N/A
Package: mg to kg



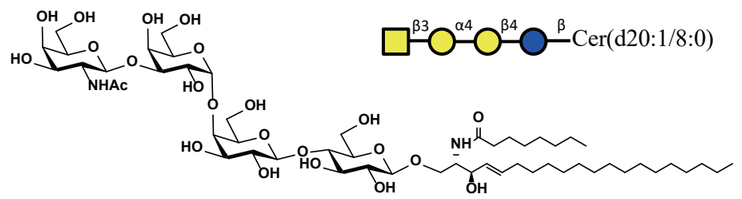
GL-2318 GB4Cer d18:1/24:1 (GalNAcb1,3Gala1,4Galb1,4GlcbCeramide)

M.F.: $C_{68}H_{124}N_2O_{23}$
M.W.: 1337.73
CAS No.: N/A
Package: mg to kg



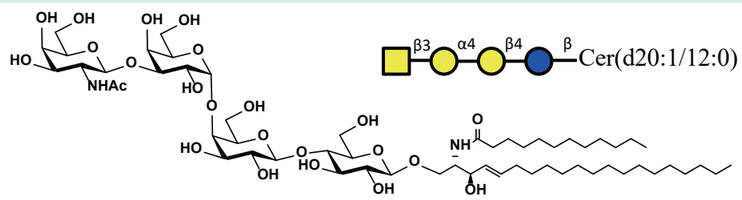
GL-2319 GB4Cer d20:1/8:0 (GalNAcb1,3Gala1,4Galb1,4GlcbCeramide)

M.F.: $C_{54}H_{98}N_2O_{23}$
M.W.: 1143.37
CAS No.: N/A
Package: mg , g



GL-2320 GB4Cer d20:1/12:0 (GalNAcb1,3Gala1,4Galb1,4GlcbCeramide)

M.F.: $C_{58}H_{106}N_2O_{23}$
M.W.: 1199.48
CAS No.: N/A
Package: mg , g



Red blood cell glycoside series (GB4)

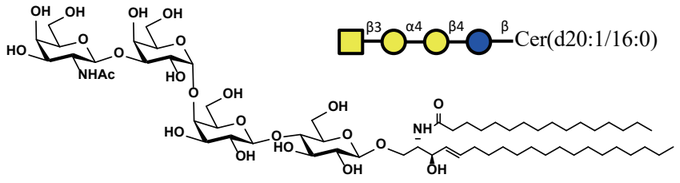
GL-2321 GB4Cer d20:1/16:0 (GalNAcb1,3Gala1,4Galb1,4GlcbCeramide)

M.F.: $C_{62}H_{114}N_2O_{23}$

M.W.: 1255.59

CAS No.: N/A

Package: mg to kg



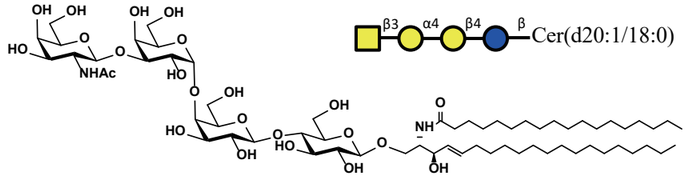
GL-2322 GB4Cer d20:1/18:0 (GalNAcb1,3Gala1,4Galb1,4GlcbCeramide)

M.F.: $C_{64}H_{118}N_2O_{23}$

M.W.: 1283.64

CAS No.: N/A

Package: mg to kg



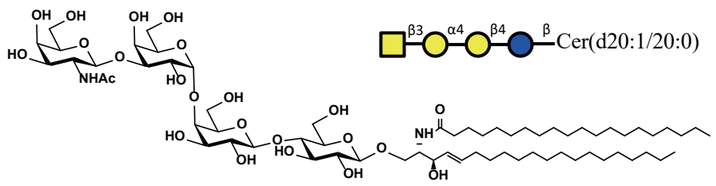
GL-2323 GB4Cer d20:1/20:0 (GalNAcb1,3Gala1,4Galb1,4GlcbCeramide)

M.F.: $C_{66}H_{122}N_2O_{23}$

M.W.: 1311.69

CAS No.: N/A

Package: mg to kg



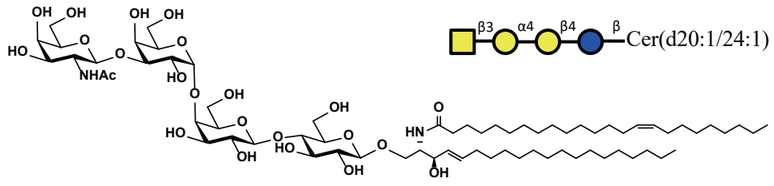
GL-2324 GB4Cer d20:1/24:1 (GalNAcb1,3Gala1,4Galb1,4GlcbCeramide)

M.F.: $C_{70}H_{128}N_2O_{23}$

M.W.: 1365.79

CAS No.: N/A

Package: mg , g



Red blood cell glycoside series (GB5)

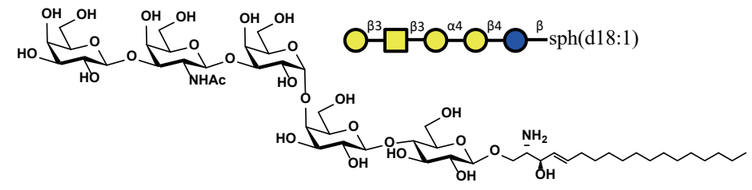
GL-0035 GB5sph d18:1 (Galb1,3GalNAcb1,3Gala1,4Galb1,4GlcbSphingosine)

M.F.: $C_{50}H_{90}N_2O_{27}$

M.W.: 1151.26

CAS No.: N/A

Package: mg to kg



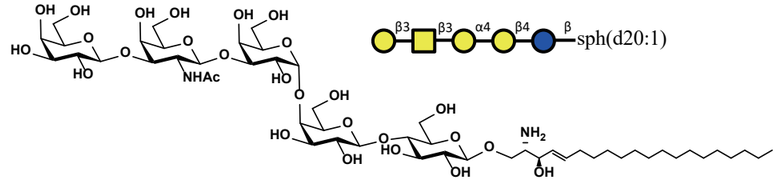
GL-0036 GB5sph d20:1 (Galb1,3GalNAcb1,3Gala1,4Galb1,4GlcbSphingosine)

M.F.: $C_{52}H_{94}N_2O_{27}$

M.W.: 1179.31

CAS No.: N/A

Package: mg to kg



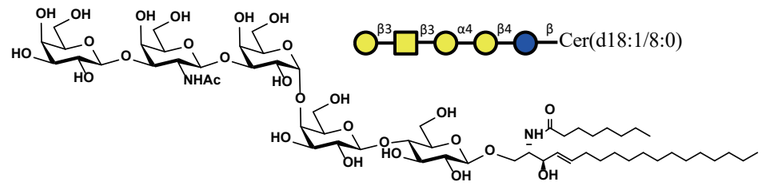
GL-2325 GB5Cer d18:1/8:0 (Galb1,3GalNAcb1,3Gala1,4Galb1,4GlcbCeramide)

M.F.: $C_{58}H_{104}N_2O_{28}$

M.W.: 1277.46

CAS No.: N/A

Package: mg to kg



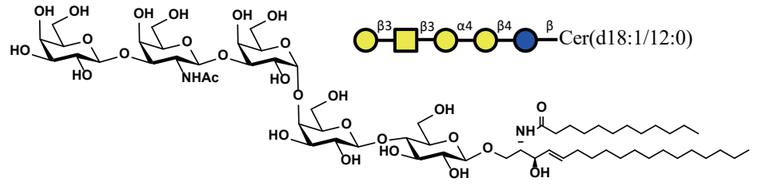
GL-2326 GB5Cer d18:1/12:0 (Galb1,3GalNAcb1,3Gala1,4Galb1,4GlcbCeramide)

M.F.: $C_{62}H_{112}N_2O_{28}$

M.W.: 1333.56

CAS No.: N/A

Package: mg , g



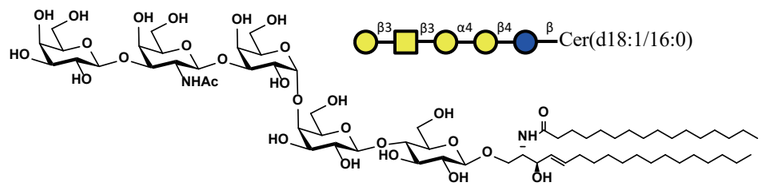
GL-2327 GB5Cer d18:1/16:0 (Galb1,3GalNAcb1,3Gala1,4Galb1,4GlcbCeramide)

M.F.: $C_{66}H_{120}N_2O_{28}$

M.W.: 1389.67

CAS No.: N/A

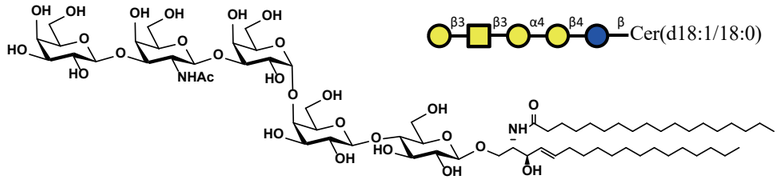
Package: mg , g



Red blood cell glycoside series (GB5)

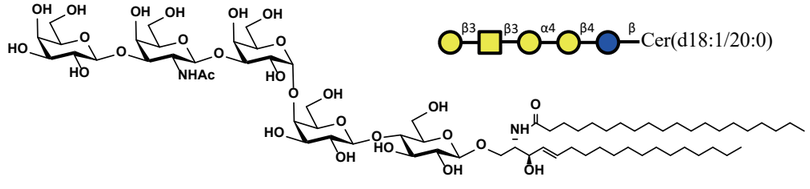
GL-2328 GB5Cer d18:1/18:0 (Galb1,3GalNAcb1,3Gala1,4Galb1,4GlcbCeramide)

M.F.: $C_{68}H_{124}N_2O_{28}$
M.W.: 1417.73
CAS No.: N/A
Package: mg to kg



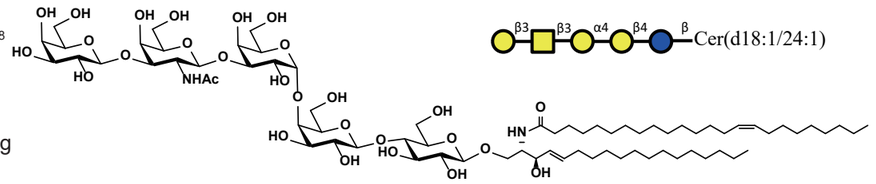
GL-2329 GB5Cer d18:1/20:0 (Galb1,3GalNAcb1,3Gala1,4Galb1,4GlcbCeramide)

M.F.: $C_{70}H_{128}N_2O_{28}$
M.W.: 1445.78
CAS No.: N/A
Package: mg to kg



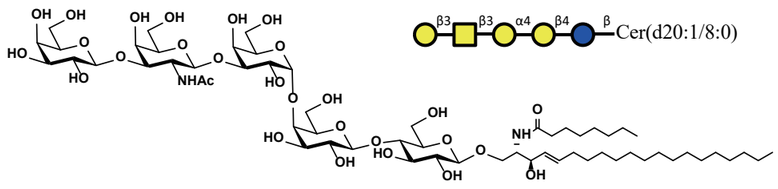
GL-2330 GB5Cer d18:1/24:1 (Galb1,3GalNAcb1,3Gala1,4Galb1,4GlcbCeramide)

M.F.: $C_{74}H_{134}N_2O_{28}$
M.W.: 1499.87
CAS No.: N/A
Package: mg to kg



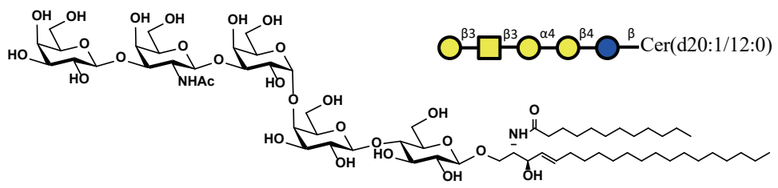
GL-2331 GB5Cer d20:1/8:0 (Galb1,3GalNAcb1,3Gala1,4Galb1,4GlcbCeramide)

M.F.: $C_{60}H_{108}N_2O_{28}$
M.W.: 1305.51
CAS No.: N/A
Package: mg , g



GL-2332 GB5Cer d20:1/12:0 (Galb1,3GalNAcb1,3Gala1,4Galb1,4GlcbCeramide)

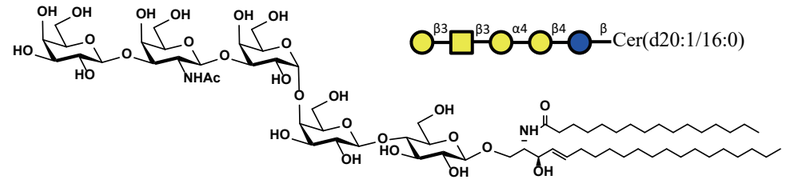
M.F.: $C_{64}H_{116}N_2O_{28}$
M.W.: 1361.62
CAS No.: N/A
Package: mg , g



Red blood cell glycoside series (GB5)

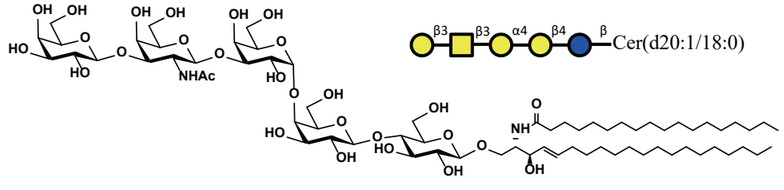
GL-2333 GB5Cer d20:1/16:0 (Galb1,3GalNAcb1,3Gala1,4Galb1,4GlcbCeramide)

M.F.: $C_{68}H_{124}N_2O_{28}$
M.W.: 1417.73
CAS No.: N/A
Package: mg to kg



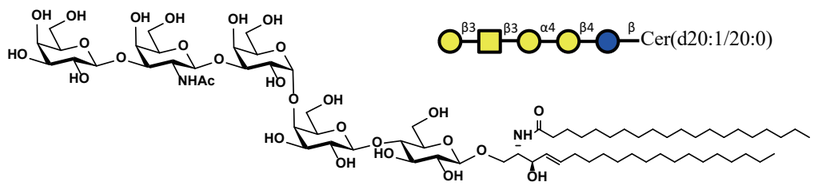
GL-2334 GB5Cer d20:1/18:0 (Galb1,3GalNAcb1,3Gala1,4Galb1,4GlcbCeramide)

M.F.: $C_{70}H_{128}N_2O_{28}$
M.W.: 1445.78
CAS No.: N/A
Package: mg to kg



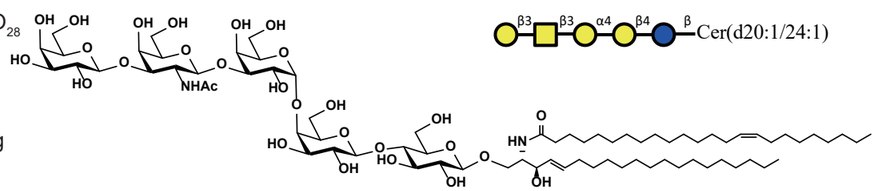
GL-2335 GB5Cer d20:1/20:0 (Galb1,3GalNAcb1,3Gala1,4Galb1,4GlcbCeramide)

M.F.: $C_{72}H_{132}N_2O_{28}$
M.W.: 1473.83
CAS No.: N/A
Package: mg to kg



GL-2336 GB5Cer d20:1/24:1 (Galb1,3GalNAcb1,3Gala1,4Galb1,4GlcbCeramide)

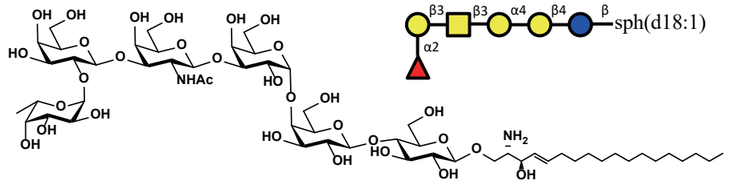
M.F.: $C_{76}H_{138}N_2O_{28}$
M.W.: 1527.93
CAS No.: N/A
Package: mg , g



GloboH

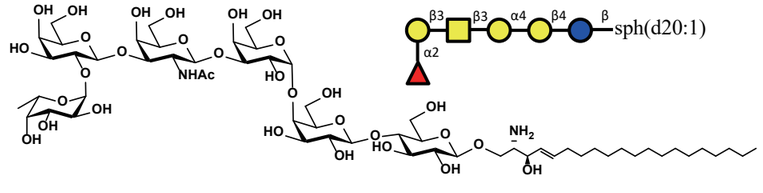
GL-0037 GloboHsph d18:1 ((Fuca1,2)Galb1,3GalNAcb1,3Gala1,4Galb1,4GlcbSphingosine)

M.F.: $C_{56}H_{100}N_2O_{31}$
M.W.: 1297.40
CAS No.: N/A
Package: mg , g



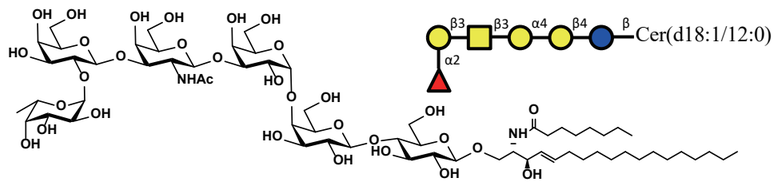
GL-0038 GloboHsph d20:1 ((Fuca1,2)Galb1,3GalNAcb1,3Gala1,4Galb1,4GlcbSphingosine)

M.F.: $C_{58}H_{104}N_2O_{31}$
M.W.: 1325.45
CAS No.: N/A
Package: mg , g



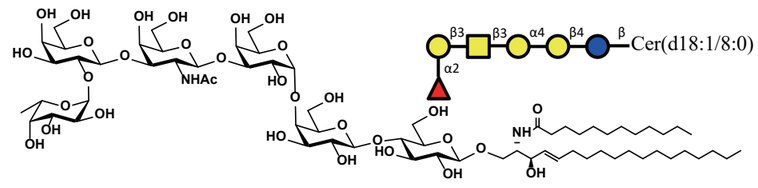
GL-2337 GloboHCer d18:1/8:0 ((Fuca1,2)Galb1,3GalNAcb1,3Gala1,4Galb1,4GlcbCeramide)

M.F.: $C_{64}H_{114}N_2O_{32}$
M.W.: 1423.60
CAS No.: N/A
Package: mg , g



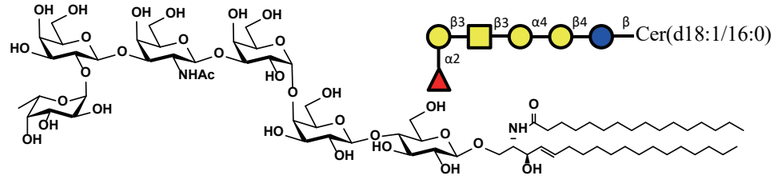
GL-2338 GloboHCer d18:1/12:0 ((Fuca1,2)Galb1,3GalNAcb1,3Gala1,4Galb1,4GlcbCeramide)

M.F.: $C_{68}H_{122}N_2O_{32}$
M.W.: 1479.71
CAS No.: N/A
Package: mg , g



GL-2339 GloboHCer d18:1/16:0 ((Fuca1,2)Galb1,3GalNAcb1,3Gala1,4Galb1,4GlcbCeramide)

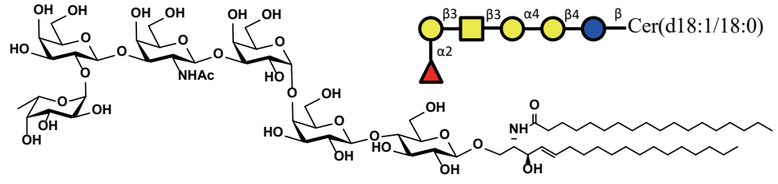
M.F.: $C_{72}H_{130}N_2O_{32}$
M.W.: 1535.81
CAS No.: N/A
Package: mg , g



GloboH

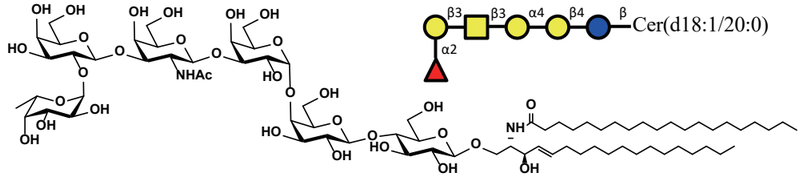
GL-2340 GloboHCer d18:1/18:0 ((Fuca1,2)Galb1,3GalNAcb1,3Gala1,4Galb1,4GlcbCeramide)

M.F.: $C_{74}H_{134}N_2O_{32}$
M.W.: 1563.87
CAS No.: N/A
Package: mg , g



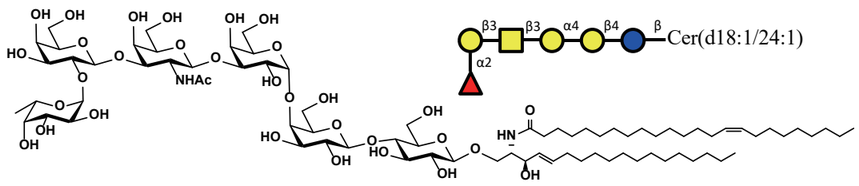
GL-2341 GloboHCer d18:1/20:0 ((Fuca1,2)Galb1,3GalNAcb1,3Gala1,4Galb1,4GlcbCeramide)

M.F.: $C_{76}H_{138}N_2O_{32}$
M.W.: 1591.92
CAS No.: N/A
Package: mg , g



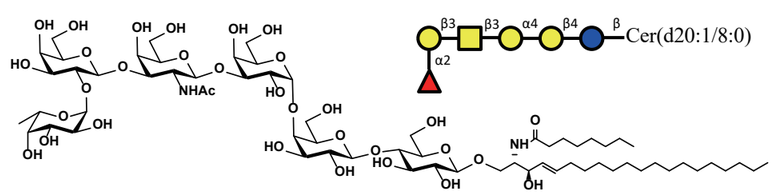
GL-2342 GloboHCer d18:1/24:1 ((Fuca1,2)Galb1,3GalNAcb1,3Gala1,4Galb1,4GlcbCeramide)

M.F.: $C_{80}H_{144}N_2O_{32}$
M.W.: 1646.01
CAS No.: N/A
Package: mg , g



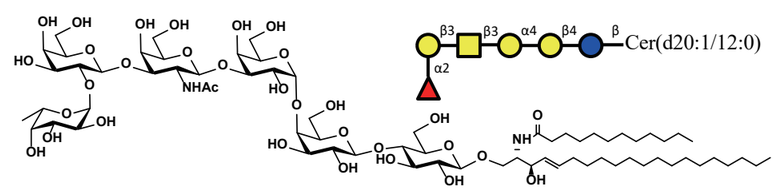
GL-2343 GloboHCer d20:1/8:0 ((Fuca1,2)Galb1,3GalNAcb1,3Gala1,4Galb1,4GlcbCeramide)

M.F.: $C_{66}H_{118}N_2O_{32}$
M.W.: 1451.65
CAS No.: N/A
Package: mg , g



GL-2344 GloboHCer d20:1/12:0 ((Fuca1,2)Galb1,3GalNAcb1,3Gala1,4Galb1,4GlcbCeramide)

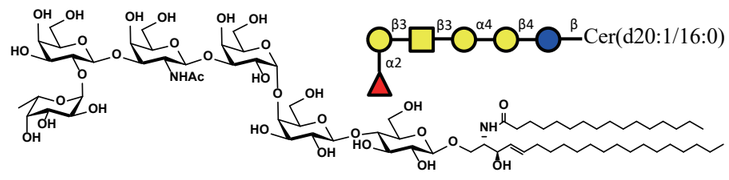
M.F.: $C_{70}H_{126}N_2O_{32}$
M.W.: 1507.76
CAS No.: N/A
Package: mg , g



GloboH

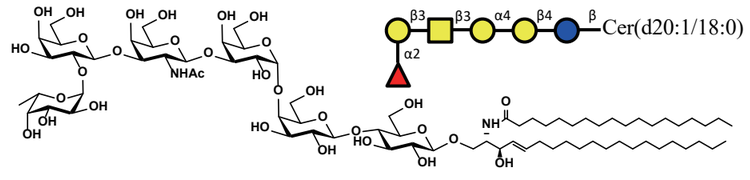
GL-2345 GloboHCer d20:1/16:0 ((Fuca1,2)Galb1,3GalNAcb1,3Gala1,4Galb1,4GlcbCeramide)

M.F.: $C_{74}H_{134}N_2O_{32}$
M.W.: 1563.87
CAS No.: N/A
Package: mg , g



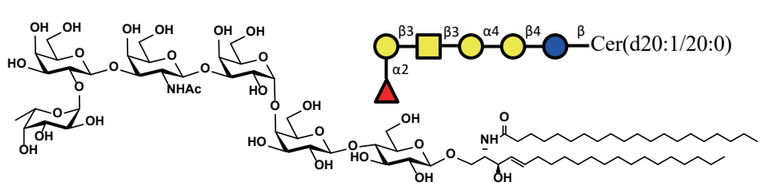
GL-2346 GloboHCer d20:1/18:0 ((Fuca1,2)Galb1,3GalNAcb1,3Gala1,4Galb1,4GlcbCeramide)

M.F.: $C_{76}H_{138}N_2O_{32}$
M.W.: 1591.92
CAS No.: N/A
Package: mg , g



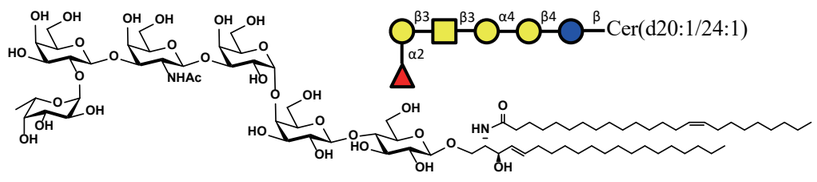
GL-2347 GloboHCer d20:1/20:0 ((Fuca1,2)Galb1,3GalNAcb1,3Gala1,4Galb1,4GlcbCeramide)

M.F.: $C_{78}H_{142}N_2O_{32}$
M.W.: 1619.98
CAS No.: N/A
Package: mg , g



GL-2348 GloboHCer d20:1/24:1 ((Fuca1,2)Galb1,3GalNAcb1,3Gala1,4Galb1,4GlcbCeramide)

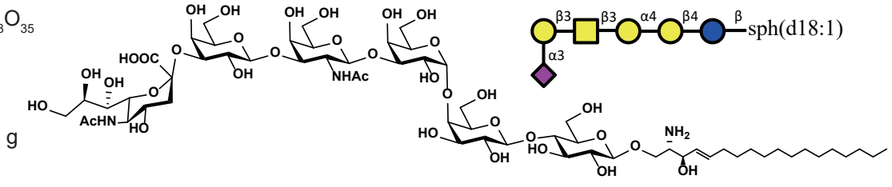
M.F.: $C_{82}H_{148}N_2O_{32}$
M.W.: 1674.07
CAS No.: N/A
Package: mg , g



Red blood cell glycoside series (SSEA-4)

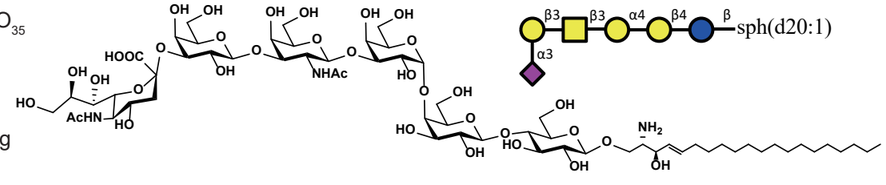
GL-0039 SSEA-4sph d18:1 ((Neu5Aca2,3)Galb1,3GalNAcb1,3Gala1,4Galb1,4Sphingosine)

M.F.: $C_{61}H_{107}N_3O_{35}$
M.W.: 1442.51
CAS No.: N/A
Package: mg , g



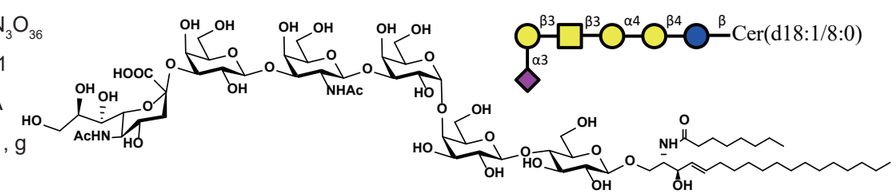
GL-0040 SSEA-4sph d20:1 ((Neu5Aca2,3)Galb1,3GalNAcb1,3Gala1,4Galb1,4Sphingosine)

M.F.: $C_{63}H_{111}N_3O_{35}$
M.W.: 1470.57
CAS NO.: N/A
Package: mg , g



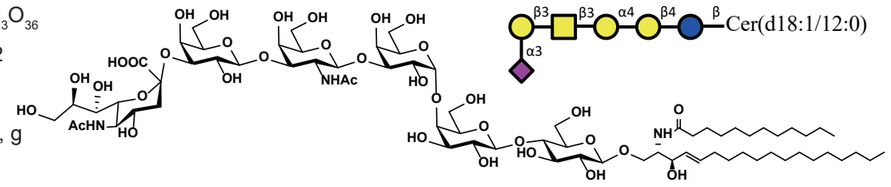
GL-2349 SSEA-4 d18:1/8:0 ((Neu5Aca2,3)Galb1,3GalNAcb1,3Gala1,4Galb1,4GlcbCeramide)

M.F.: $C_{69}H_{121}N_3O_{36}$
M.W.: 1568.71
CAS No.: N/A
Package: mg , g



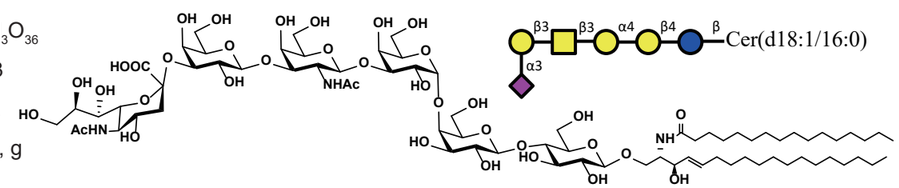
GL-2350 SSEA-4 d18:1/12:0 ((Neu5Aca2,3)Galb1,3GalNAcb1,3Gala1,4Galb1,4GlcbCeramide)

M.F.: $C_{73}H_{129}N_3O_{36}$
M.W.: 1624.82
CAS No.: N/A
Package: mg , g



GL-2351 SSEA-4 d18:1/16:0 ((Neu5Aca2,3)Galb1,3GalNAcb1,3Gala1,4Galb1,4GlcbCeramide)

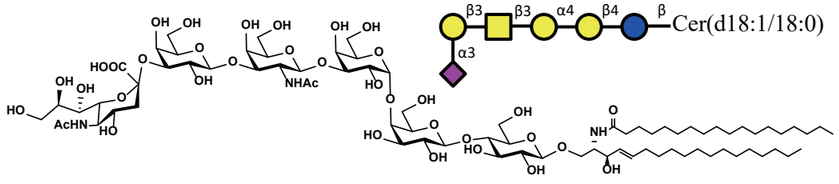
M.F.: $C_{77}H_{137}N_3O_{36}$
M.W.: 1680.93
CAS No.: N/A
Package: mg , g



Red blood cell glycoside series (SSEA-4)

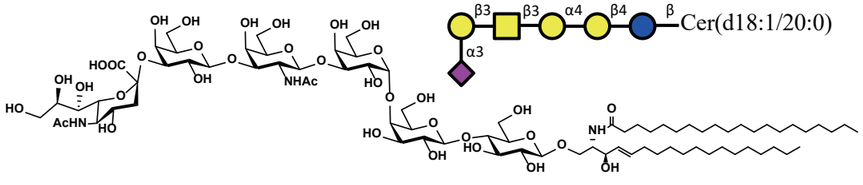
GL-2352 SSEA-4 d18:1/18:0 ((Neu5Aca2,3)Galb1,3GalNAcb1,3Gala1,4Galb1,4GlcbCeramide)

M.F.: $C_{79}H_{141}N_3O_{36}$
M.W.: 1708.98
CAS No.: N/A
Package: mg , g



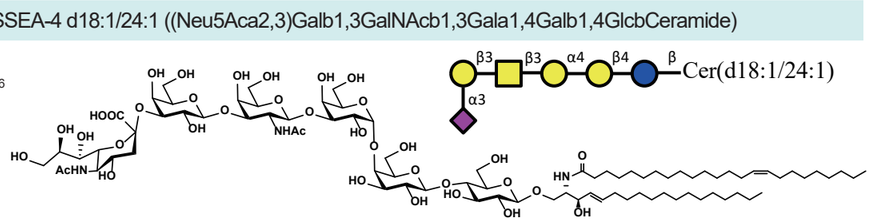
GL-2353 SSEA-4 d18:1/20:0 ((Neu5Aca2,3)Galb1,3GalNAcb1,3Gala1,4Galb1,4GlcbCeramide)

M.F.: $C_{81}H_{145}N_3O_{36}$
M.W.: 1737.04
CAS No.: N/A
Package: mg , g



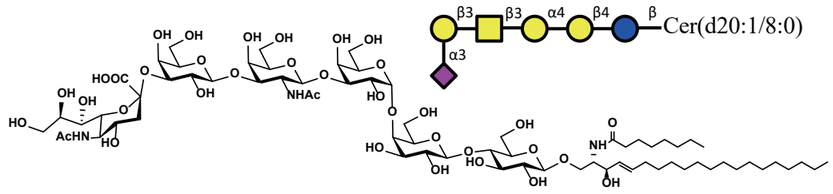
GL-2354 SSEA-4 d18:1/24:1 ((Neu5Aca2,3)Galb1,3GalNAcb1,3Gala1,4Galb1,4GlcbCeramide)

M.F.: $C_{85}H_{151}N_3O_{36}$
M.W.: 1791.13
CAS No.: N/A
Package: mg , g



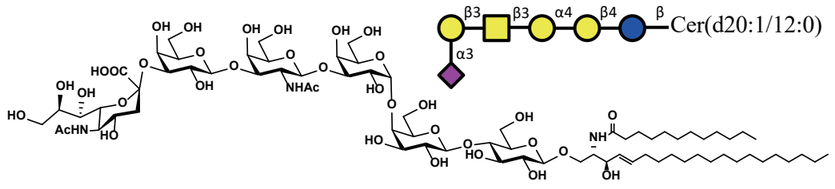
GL-2355 SSEA-4 d20:1/8:0 ((Neu5Aca2,3)Galb1,3GalNAcb1,3Gala1,4Galb1,4GlcbCeramide)

M.F.: $C_{71}H_{125}N_3O_{36}$
M.W.: 1596.77
CAS No.: N/A
Package: mg , g



GL-2356 SSEA-4 d20:1/12:0 ((Neu5Aca2,3)Galb1,3GalNAcb1,3Gala1,4Galb1,4GlcbCeramide)

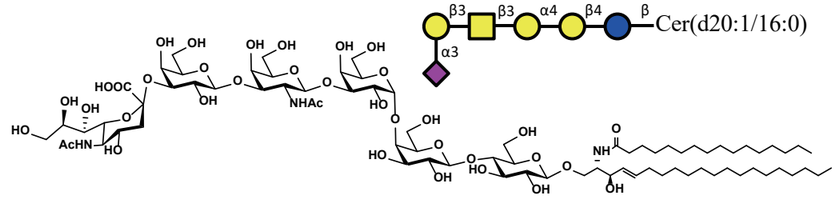
M.F.: $C_{75}H_{133}N_3O_{36}$
M.W.: 1652.87
CAS No.: N/A
Package: mg , g



Red blood cell glycoside series (SSEA-4)

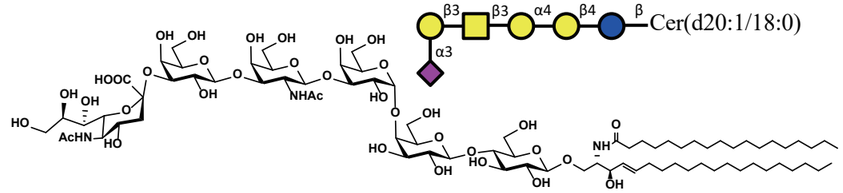
GL-2357 SSEA-4 d20:1/16:0 ((Neu5Aca2,3)Galb1,3GalNAcb1,3Gala1,4Galb1,4GlcbCeramide)

M.F.: $C_{79}H_{141}N_3O_{36}$
M.W.: 1708.98
CAS No.: N/A
Package: mg , g



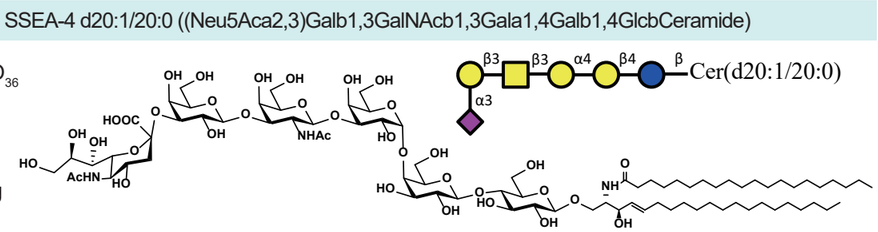
GL-2358 SSEA-4 d20:1/18:0 ((Neu5Aca2,3)Galb1,3GalNAcb1,3Gala1,4Galb1,4GlcbCeramide)

M.F.: $C_{81}H_{145}N_3O_{36}$
M.W.: 1737.04
CAS No.: N/A
Package: mg , g



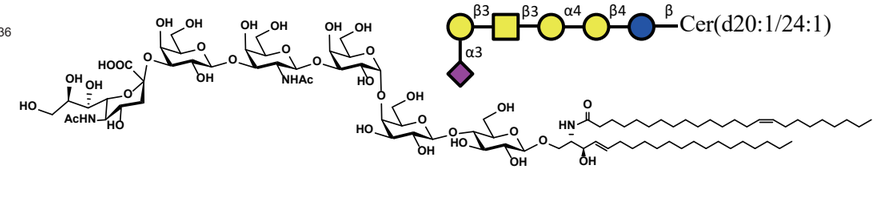
GL-2359 SSEA-4 d20:1/20:0 ((Neu5Aca2,3)Galb1,3GalNAcb1,3Gala1,4Galb1,4GlcbCeramide)

M.F.: $C_{83}H_{149}N_3O_{36}$
M.W.: 1765.09
CAS NO.: N/A
Package: mg , g



GL-2360 SSEA-4 d20:1/24:1 ((Neu5Aca2,3)Galb1,3GalNAcb1,3Gala1,4Galb1,4GlcbCeramide)

M.F.: $C_{87}H_{155}N_3O_{36}$
M.W.: 1819.18
CAS No.: N/A
Package: mg , g



Red blood cell glycoside series (iGB3)

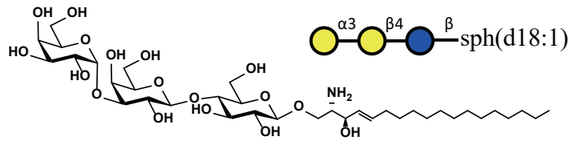
GL-0041 iGB3sph d18:1 (Gala1,3Galb1,4GlcbSphingosine)

M.F.: $C_{36}H_{67}NO_{17}$

M.W.: 785.92

CAS No.: N/A

Package: mg , g



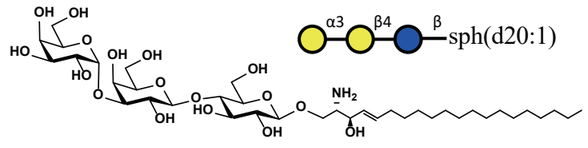
GL-0042 iGB3sph d20:1 (Gala1,3Galb1,4GlcbSphingosine)

M.F.: $C_{38}H_{71}NO_{17}$

M.W.: 813.98

CAS No.: N/A

Package: mg , g



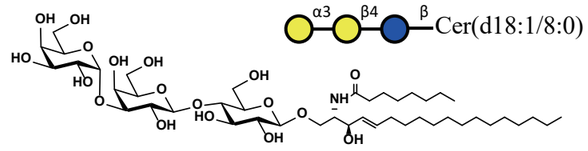
GL-2361 iGB3Cer d18:1/8:0 (Gala1,3Galb1,4GlcbCeramide)

M.F.: $C_{44}H_{81}NO_{18}$

M.W.: 912.12

CAS No.: N/A

Package: mg , g



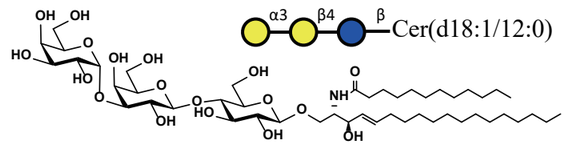
GL-2362 iGB3Cer d18:1/12:0 (Gala1,3Galb1,4GlcbCeramide)

M.F.: $C_{48}H_{89}NO_{18}$

M.W.: 968.23

CAS No.: N/A

Package: mg , g



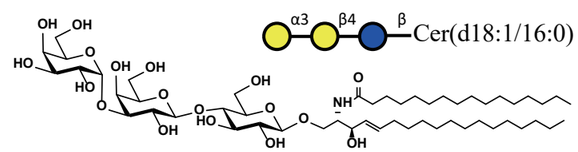
GL-2363 iGB3Cer d18:1/16:0 (Gala1,3Galb1,4GlcbCeramide)

M.F.: $C_{52}H_{97}NO_{18}$

M.W.: 1024.34

CAS No.: N/A

Package: mg , g



Red blood cell glycoside series (iGB3)

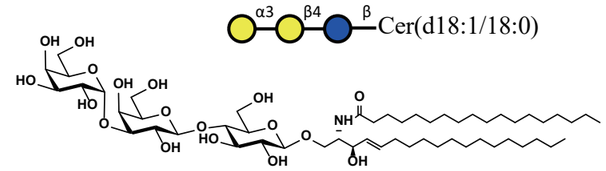
GL-2364 iGB3Cer d18:1/18:0 (Gala1,3Galb1,4GlcbCeramide)

M.F.: $C_{54}H_{101}NO_{18}$

M.W.: 1052.39

CAS No.: N/A

Package: mg , g



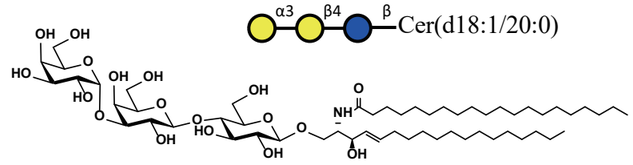
GL-2365 iGB3Cer d18:1/20:0 (Gala1,3Galb1,4GlcbCeramide)

M.F.: $C_{56}H_{105}NO_{18}$

M.W.: 1080.45

CAS No.: N/A

Package: mg , g



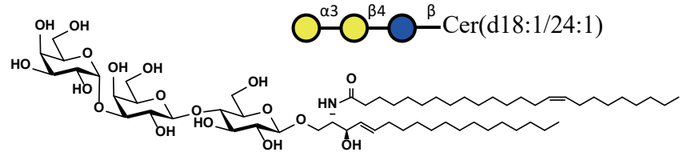
GL-2366 iGB3Cer d18:1/24:1 (Gala1,3Galb1,4GlcbCeramide)

M.F.: $C_{60}H_{111}NO_{18}$

M.W.: 1134.54

CAS No.: N/A

Package: mg , g



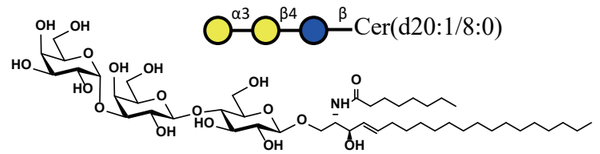
GL-2367 iGB3Cer d20:1/8:0 (Gala1,3Galb1,4GlcbCeramide)

M.F.: $C_{46}H_{85}NO_{18}$

M.W.: 940.18

CAS No.: N/A

Package: mg , g



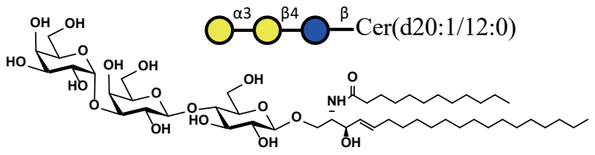
GL-2368 iGB3Cer d20:1/12:0 (Gala1,3Galb1,4GlcbCeramide)

M.F.: $C_{50}H_{93}NO_{18}$

M.W.: 996.28

CAS No.: N/A

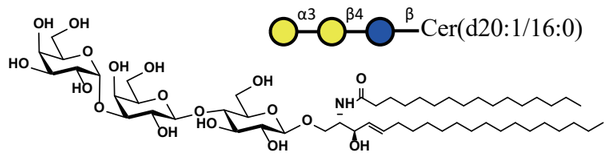
Package: mg , g



Red blood cell glycoside series (iGB3)

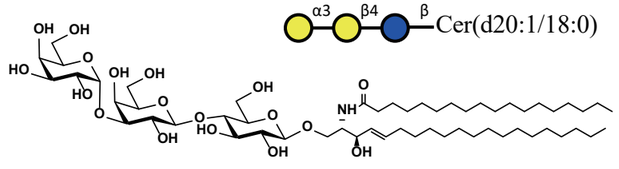
GL-2369 iGB3Cer d20:1/16:0 (Gala1,3Galb1,4GlcbCeramide)

M.F.: $C_{54}H_{101}NO_{18}$
M.W.: 1052.39
CAS No.: N/A
Package: mg , g



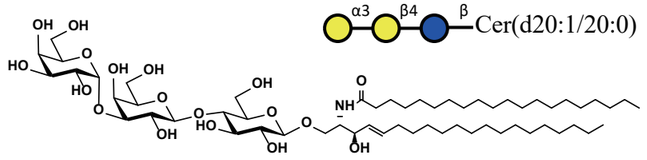
GL-2370 iGB3Cer d20:1/18:0 (Gala1,3Galb1,4GlcbCeramide)

M.F.: $C_{56}H_{105}NO_{18}$
M.W.: 1080.45
CAS No.: N/A
Package: mg , g



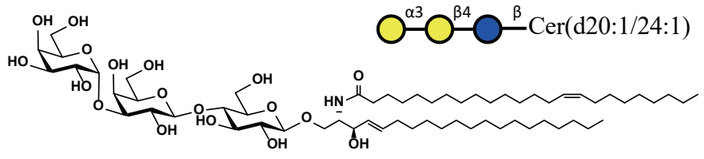
GL-2371 iGB3Cer d20:1/20:0 (Gala1,3Galb1,4GlcbCeramide)

M.F.: $C_{58}H_{109}NO_{18}$
M.W.: 1108.50
CAS No.: N/A
Package: mg , g



GL-2372 iGB3Cer d20:1/24:1 (Gala1,3Galb1,4GlcbCeramide)

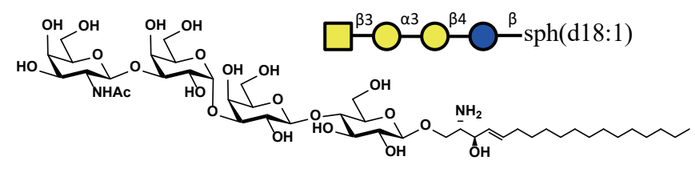
M.F.: $C_{62}H_{115}NO_{18}$
M.W.: 1162.59
CAS No.: N/A
Package: mg , g



Red blood cell glycoside series (iGB4)

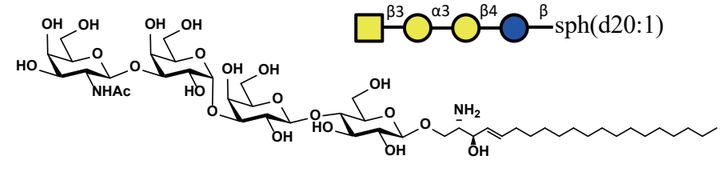
GL-0043 iGB4sph d18:1 (GalNAcb1,3Gala1,3Galb1,4GlcbSphingosine)

M.F.: $C_{44}H_{80}N_2O_{22}$
M.W.: 989.12
CAS No.: N/A
Package: mg , g



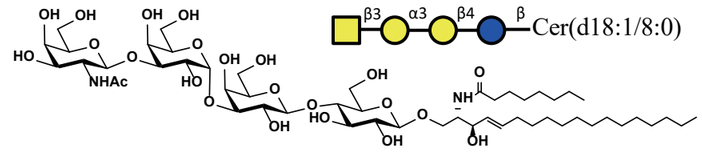
GL-0044 iGB4sph d20:1 (GalNAcb1,3Gala1,3Galb1,4GlcbSphingosine)

M.F.: $C_{46}H_{84}N_2O_{22}$
M.W.: 1017.17
CAS No.: N/A
Package: mg , g



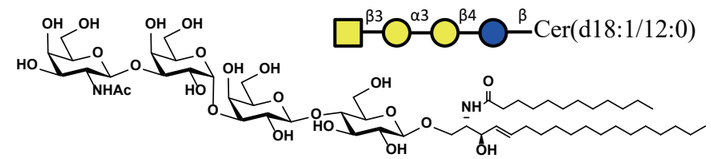
GL-2373 iGB4Cer d18:1/8:0 (GalNAcb1,3Gala1,3Galb1,4GlcbCeramide)

M.F.: $C_{52}H_{94}N_2O_{23}$
M.W.: 1115.32
CAS No.: N/A
Package: mg , g



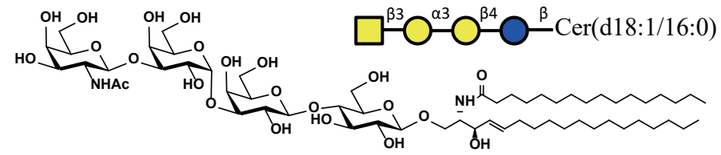
GL-2374 iGB4Cer d18:1/12:0 (GalNAcb1,3Gala1,3Galb1,4GlcbCeramide)

M.F.: $C_{56}H_{102}N_2O_{23}$
M.W.: 1171.42
CAS No.: N/A
Package: mg , g



GL-2375 iGB4Cer d18:1/16:0 (GalNAcb1,3Gala1,3Galb1,4GlcbCeramide)

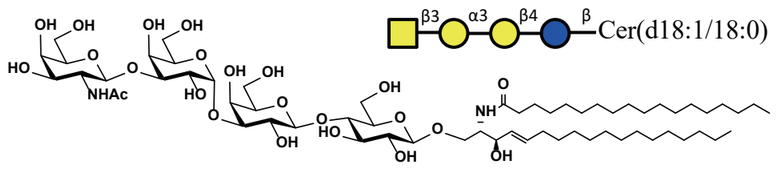
M.F.: $C_{60}H_{110}N_2O_{23}$
M.W.: 1227.53
CAS No.: N/A
Package: mg , g



Red blood cell glycoside series (iGB4)

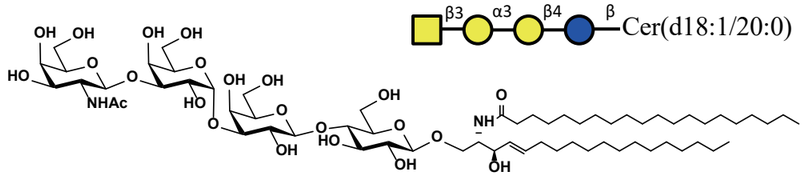
GL-2376 iGB4Cer d18:1/18:0 (GalNAcb1,3Gala1,3Galb1,4GlcbCeramide)

M.F.: $C_{62}H_{114}N_2O_{23}$
M.W.: 1255.59
CAS No.: N/A
Package: mg , g



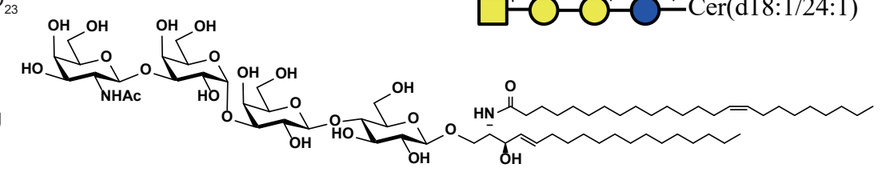
GL-2377 iGB4Cer d18:1/20:0 (GalNAcb1,3Gala1,3Galb1,4GlcbCeramide)

M.F.: $C_{64}H_{118}N_2O_{23}$
M.W.: 1283.64
CAS No.: N/A
Package: mg , g



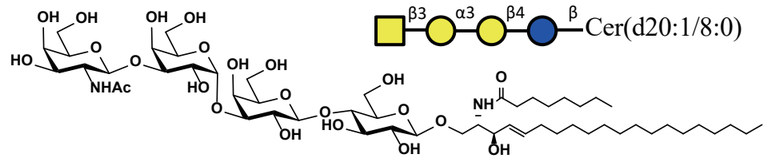
GL-2378 iGB4Cer d18:1/24:1 (GalNAcb1,3Gala1,3Galb1,4GlcbCeramide)

M.F.: $C_{68}H_{124}N_2O_{23}$
M.W.: 1337.73
CAS No.: N/A
Package: mg , g



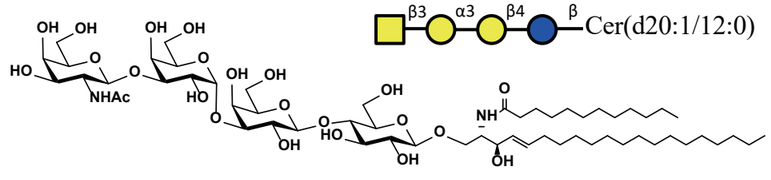
GL-2379 iGB4Cer d20:1/8:0 (GalNAcb1,3Gala1,3Galb1,4GlcbCeramide)

M.F.: $C_{54}H_{98}N_2O_{23}$
M.W.: 1143.37
CAS No.: N/A
Package: mg , g



GL-2380 iGB4Cer d20:1/12:0 (GalNAcb1,3Gala1,3Galb1,4GlcbCeramide)

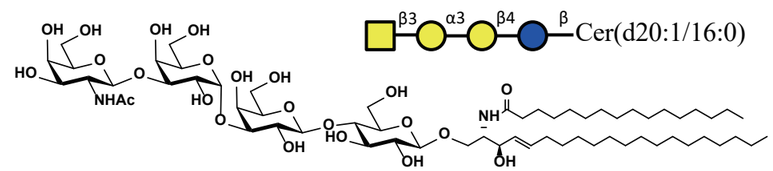
M.F.: $C_{58}H_{106}N_2O_{23}$
M.W.: 1199.48
CAS No.: N/A
Package: mg , g



Red blood cell glycoside series (iGB4)

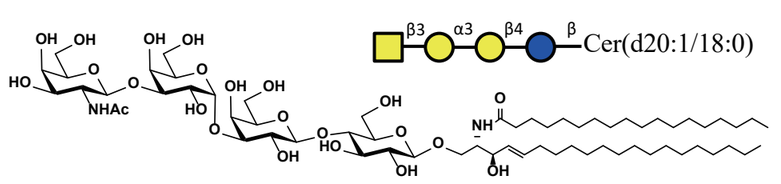
GL-2381 iGB4Cer d20:1/16:0 (GalNAcb1,3Gala1,3Galb1,4GlcbCeramide)

M.F.: $C_{62}H_{114}N_2O_{23}$
M.W.: 1255.59
CAS No.: N/A
Package: mg , g



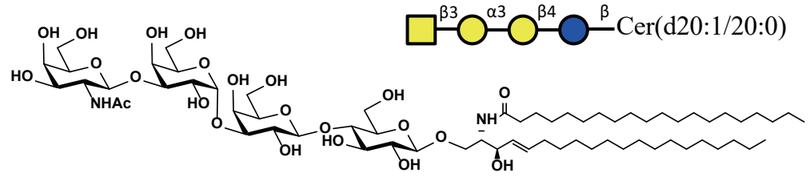
GL-2382 iGB4Cer d20:1/18:0 (GalNAcb1,3Gala1,3Galb1,4GlcbCeramide)

M.F.: $C_{64}H_{118}N_2O_{23}$
M.W.: 1283.64
CAS No.: N/A
Package: mg , g



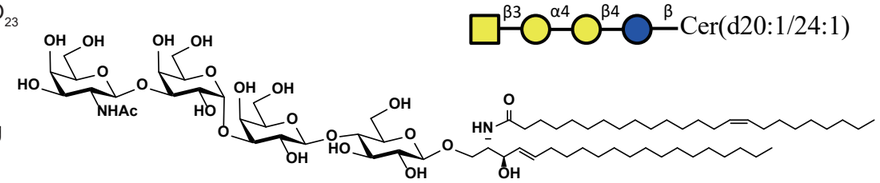
GL-2383 iGB4Cer d20:1/20:0 (GalNAcb1,3Gala1,3Galb1,4GlcbCeramide)

M.F.: $C_{66}H_{122}N_2O_{23}$
M.W.: 1311.69
CAS No.: N/A
Package: mg , g



GL-2384 iGB4Cer d20:1/24:1 (GalNAcb1,3Gala1,3Galb1,4GlcbCeramide)

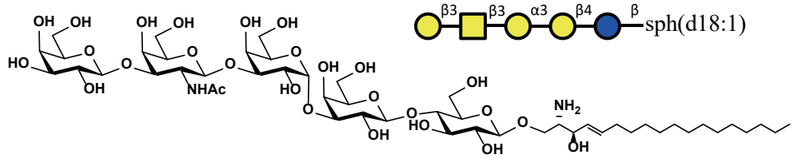
M.F.: $C_{70}H_{128}N_2O_{23}$
M.W.: 1365.79
CAS No.: N/A
Package: mg , g



Red blood cell glycoside series (iGB5)

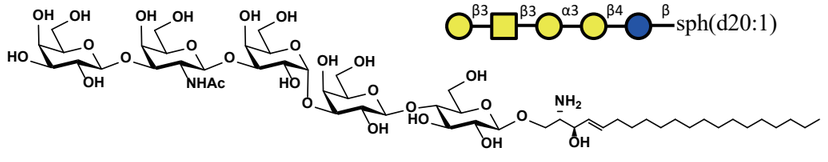
GL-0045 iGB5sph d18:1 (Galb1,3GalNAcb1,3Gala1,3Galb1,4GlcbSphingosine)

M.F.: $C_{50}H_{90}N_2O_{27}$
M.W.: 1151.26
CAS No.: N/A
Package: mg , g



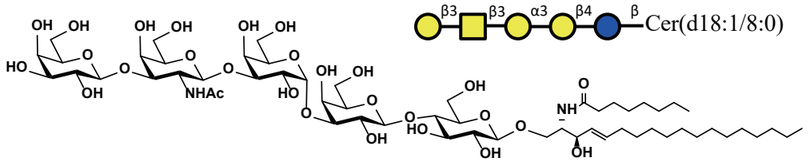
GL-0046 iGB5sph d20:1 (Galb1,3GalNAcb1,3Gala1,3Galb1,4GlcbSphingosine)

M.F.: $C_{52}H_{94}N_2O_{27}$
M.W.: 1179.31
CAS No.: N/A
Package: mg , g



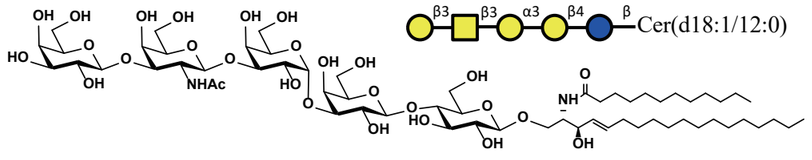
GL-2385 iGB5Cer d18:1/8:0 (Galb1,3GalNAcb1,3Gala1,3Galb1,4GlcbCeramide)

M.F.: $C_{58}H_{104}N_2O_{28}$
M.W.: 1277.46
CAS No.: N/A
Package: mg , g



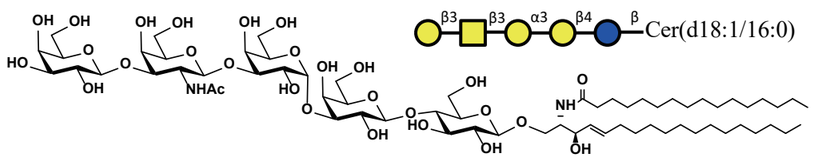
GL-2386 iGB5Cer d18:1/12:0 (Galb1,3GalNAcb1,3Gala1,3Galb1,4GlcbCeramide)

M.F.: $C_{62}H_{112}N_2O_{28}$
M.W.: 1333.56
CAS No.: N/A
Package: mg , g



GL-2387 iGB5Cer d18:1/16:0 (Galb1,3GalNAcb1,3Gala1,3Galb1,4GlcbCeramide)

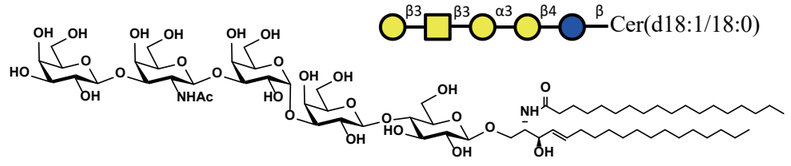
M.F.: $C_{66}H_{120}N_2O_{28}$
M.W.: 1389.67
CAS No.: N/A
Package: mg , g



Red blood cell glycoside series (iGB5)

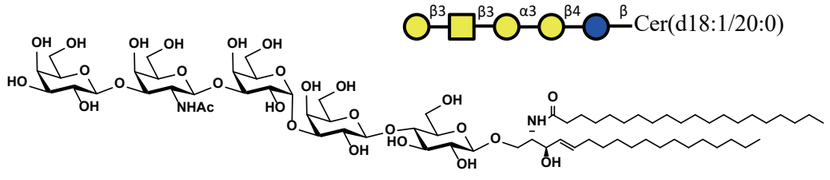
GL-2388 iGB5Cer d18:1/18:0 (Galb1,3GalNAcb1,3Gala1,3Galb1,4GlcbCeramide)

M.F.: $C_{68}H_{124}N_2O_{28}$
M.W.: 1417.73
CAS No.: N/A
Package: mg , g



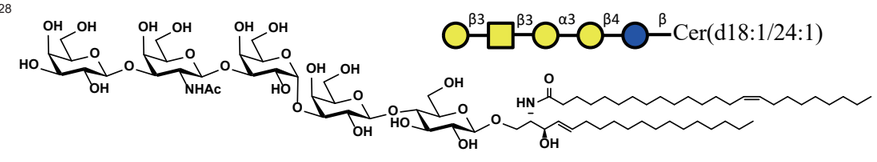
GL-2389 iGB5Cer d18:1/20:0 (Galb1,3GalNAcb1,3Gala1,3Galb1,4GlcbCeramide)

M.F.: $C_{70}H_{128}N_2O_{28}$
M.W.: 1445.78
CAS No.: N/A
Package: mg , g



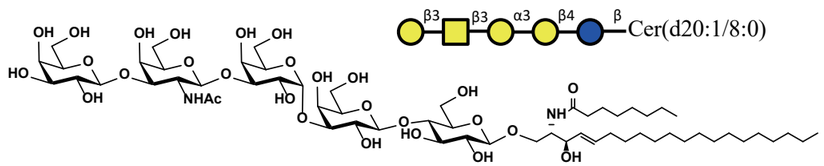
GL-2390 iGB5Cer d18:1/24:1 (Galb1,3GalNAcb1,3Gala1,3Galb1,4GlcbCeramide)

M.F.: $C_{74}H_{134}N_2O_{28}$
M.W.: 1499.87
CAS No.: N/A
Package: mg , g



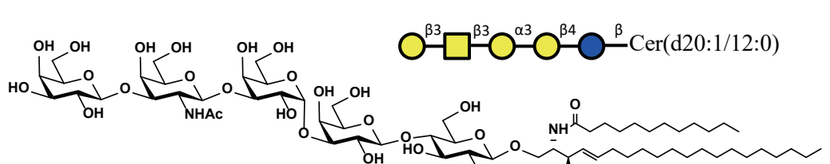
GL-2391 iGB5Cer d20:1/8:0 (Galb1,3GalNAcb1,3Gala1,3Galb1,4GlcbCeramide)

M.F.: $C_{60}H_{108}N_2O_{28}$
M.W.: 1305.51
CAS No.: N/A
Package: mg , g



GL-2392 iGB5Cer d20:1/12:0 (Galb1,3GalNAcb1,3Gala1,3Galb1,4GlcbCeramide)

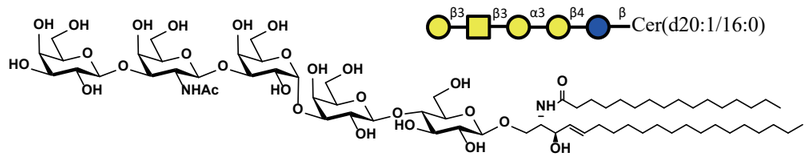
M.F.: $C_{64}H_{116}N_2O_{28}$
M.W.: 1361.62
CAS No.: N/A
Package: mg , g



Red blood cell glycoside series (iGB5)

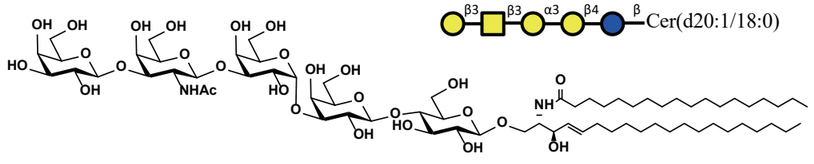
GL-2393 iGB5Cer d20:1/16:0 (Galb1,3GalNAcb1,3Gala1,3Galb1,4GlcbCeramide)

M.F.: $C_{68}H_{124}N_2O_{28}$
M.W.: 1417.73
CAS No.: N/A
Package: mg , g



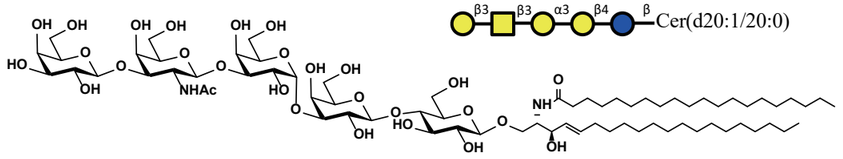
GL-2394 iGB5Cer d20:1/18:0 (Galb1,3GalNAcb1,3Gala1,3Galb1,4GlcbCeramide)

M.F.: $C_{70}H_{128}N_2O_{28}$
M.W.: 1445.78
CAS No.: N/A
Package: mg , g



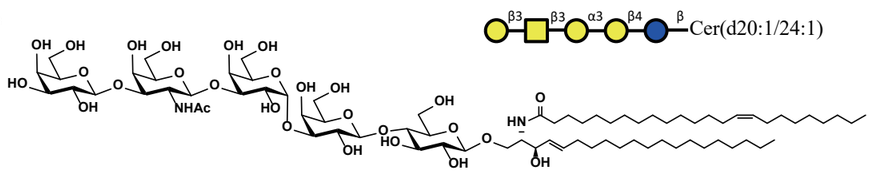
GL-2395 iGB5Cer d20:1/20:0 (Galb1,3GalNAcb1,3Gala1,3Galb1,4GlcbCeramide)

M.F.: $C_{72}H_{134}N_2O_{28}$
M.W.: 1473.83
CAS No.: N/A
Package: mg , g



GL-2396 iGB5Cer d20:1/24:1 (Galb1,3GalNAcb1,3Gala1,3Galb1,4GlcbCeramide)

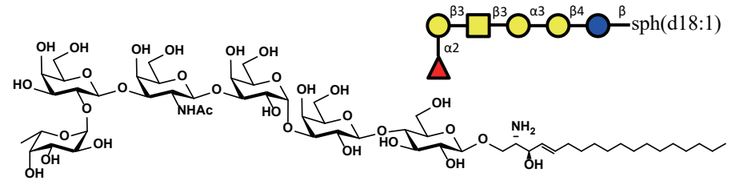
M.F.: $C_{76}H_{138}N_2O_{28}$
M.W.: 1527.93
CAS No.: N/A
Package: mg , g



Red blood cell glycoside series (iGloboH)

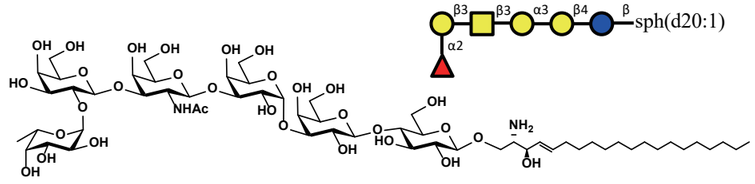
GL-0047 iGloboHsph d18:1 ((Fuca1,2)Galb1,3GalNAcb1,3Gala1,3Galb1,4GlcbSphingosine)

M.F.: $C_{56}H_{100}N_2O_{31}$
M.W.: 1297.40
CAS No.: N/A
Package: mg , g



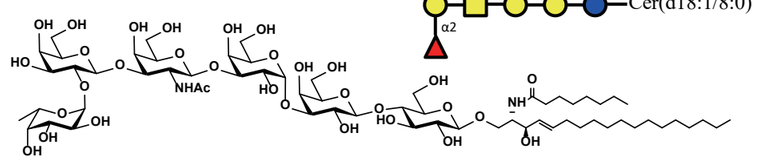
GL-0048 iGloboHsph d20:1 ((Fuca1,2)Galb1,3GalNAcb1,3Gala1,3Galb1,4GlcbSphingosine)

M.F.: $C_{58}H_{104}N_2O_{31}$
M.W.: 1325.45
CAS No.: N/A
Package: mg , g



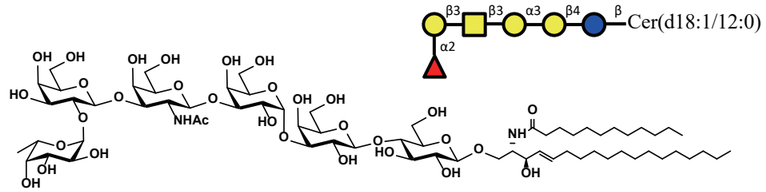
GL-2397 iGloboHCer d18:1/8:0 ((Fuca1,2)Galb1,3GalNAcb1,3Gala1,3Galb1,4GlcbCeramide)

M.F.: $C_{64}H_{114}N_2O_{32}$
M.W.: 1423.60
CAS No.: N/A
Package: mg to g



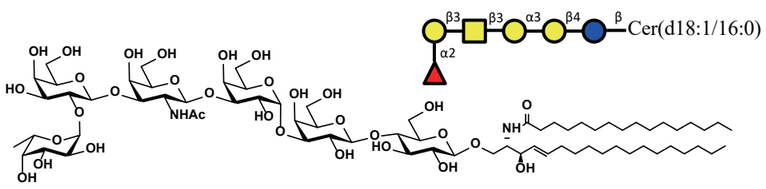
GL-2398 iGloboHCer d18:1/12:0 ((Fuca1,2)Galb1,3GalNAcb1,3Gala1,3Galb1,4GlcbCeramide)

M.F.: $C_{68}H_{122}N_2O_{32}$
M.W.: 1479.71
CAS No.: N/A
Package: mg to g



GL-2399 iGloboHCer d18:1/16:0 ((Fuca1,2)Galb1,3GalNAcb1,3Gala1,3Galb1,4GlcbCeramide)

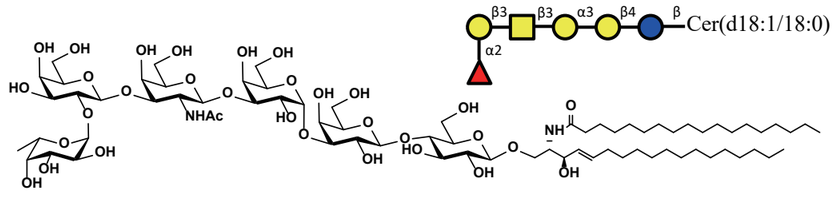
M.F.: $C_{72}H_{130}N_2O_{32}$
M.W.: 1535.81
CAS No.: N/A
Package: mg , g



Red blood cell glycoside series (iGloboH)

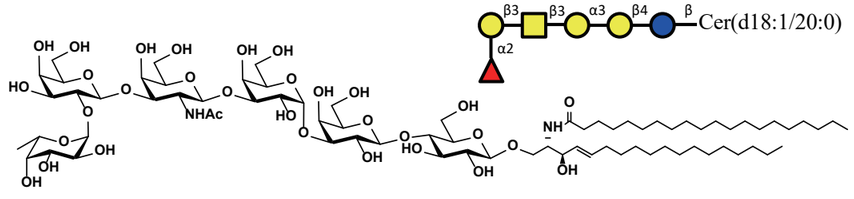
GL-2400 iGloboHCer d18:1/18:0 ((Fuca1,2)Galb1,3GalNAcb1,3Gala1,3Galb1,4GlcbCeramide)

M.F.: $C_{74}H_{134}N_2O_{32}$
M.W.: 1563.87
CAS No.: N/A
Package: mg , g



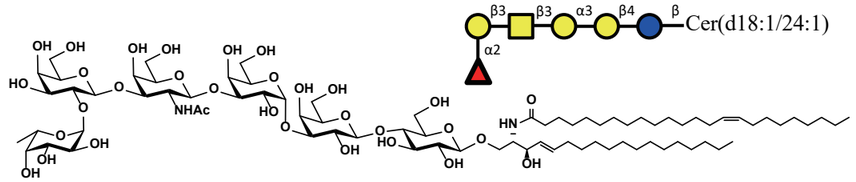
GL-2401 iGloboHCer d18:1/20:0 ((Fuca1,2)Galb1,3GalNAcb1,3Gala1,3Galb1,4GlcbCeramide)

M.F.: $C_{76}H_{138}N_2O_{32}$
M.W.: 1591.92
CAS No.: N/A
Package: mg , g



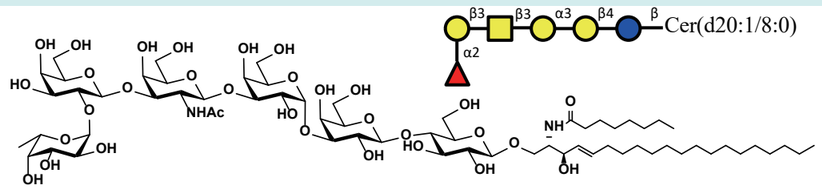
GL-2402 iGloboHCer d18:1/24:1 ((Fuca1,2)Galb1,3GalNAcb1,3Gala1,3Galb1,4GlcbCeramide)

M.F.: $C_{80}H_{144}N_2O_{32}$
M.W.: 1646.01
CAS No.: N/A
Package: mg , g



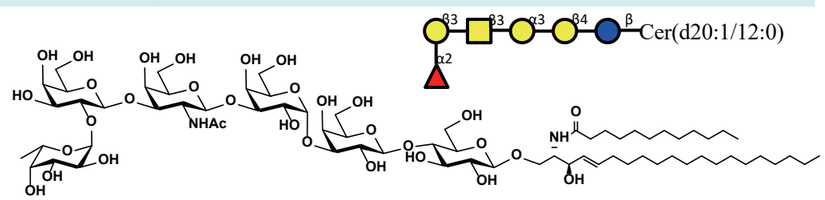
GL-2403 iGloboHCer d20:1/8:0 ((Fuca1,2)Galb1,3GalNAcb1,3Gala1,3Galb1,4GlcbCeramide)

M.F.: $C_{66}H_{118}N_2O_{32}$
M.W.: 1451.65
CAS No.: N/A
Package: mg , g



GL-2404 iGloboHCer d20:1/12:0 ((Fuca1,2)Galb1,3GalNAcb1,3Gala1,3Galb1,4GlcbCeramide)

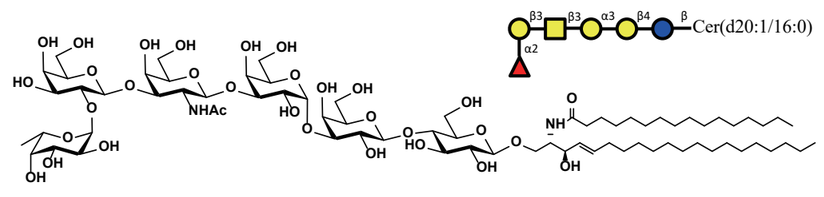
M.F.: $C_{70}H_{126}N_2O_{32}$
M.W.: 1507.76
CAS No.: N/A
Package: mg , g



Red blood cell glycoside series (iGloboH)

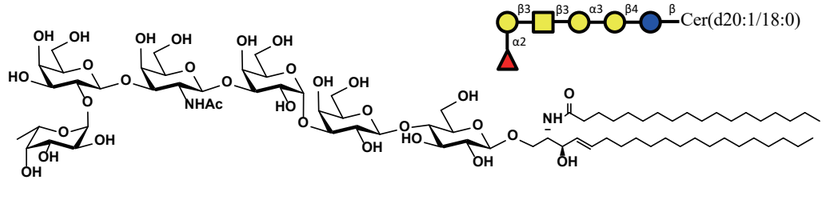
GL-2405 iGloboHCer d20:1/16:0 ((Fuca1,2)Galb1,3GalNAcb1,3Gala1,3Galb1,4GlcbCeramide)

M.F.: $C_{74}H_{134}N_2O_{32}$
M.W.: 1563.87
CAS No.: N/A
Package: mg , g



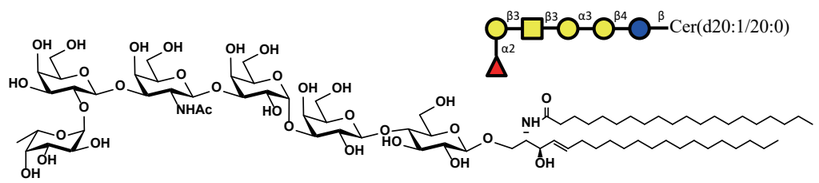
GL-2406 iGloboHCer d20:1/18:0 ((Fuca1,2)Galb1,3GalNAcb1,3Gala1,3Galb1,4GlcbCeramide)

M.F.: $C_{76}H_{138}N_2O_{32}$
M.W.: 1591.92
CAS No.: N/A
Package: mg , g



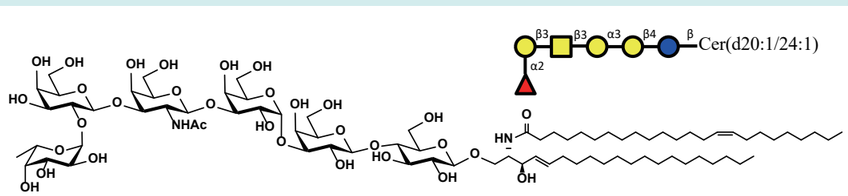
GL-2407 iGloboHCer d20:1/20:0 ((Fuca1,2)Galb1,3GalNAcb1,3Gala1,3Galb1,4GlcbCeramide)

M.F.: $C_{78}H_{142}N_2O_{32}$
M.W.: 1619.98
CAS No.: N/A
Package: mg , g



GL-2408 iGloboHCer d20:1/24:1 ((Fuca1,2)Galb1,3GalNAcb1,3Gala1,3Galb1,4GlcbCeramide)

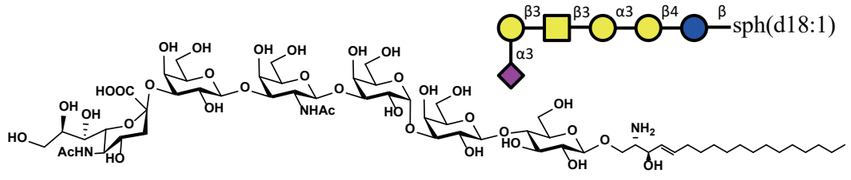
M.F.: $C_{82}H_{148}N_2O_{32}$
M.W.: 1674.07
CAS No.: N/A
Package: mg , g



Red blood cell glycoside series (Sialyl iGb5)

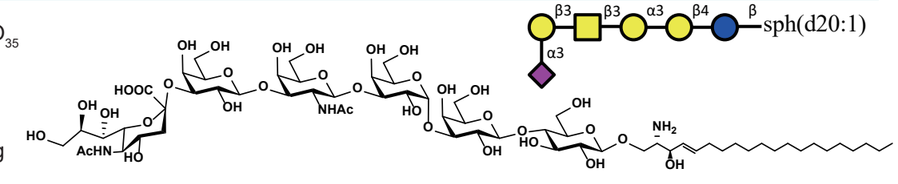
GL-0049 Sialyl-iGB5sph d18:1 ((Neu5Aca2,3)Galb1,3GalNAcb1,3Gala1,3Galb1,4GlcbSphingosine)

M.F.: $C_{61}H_{107}N_3O_{35}$
M.W.: 1442.51
CAS No.: N/A
Package: mg , g



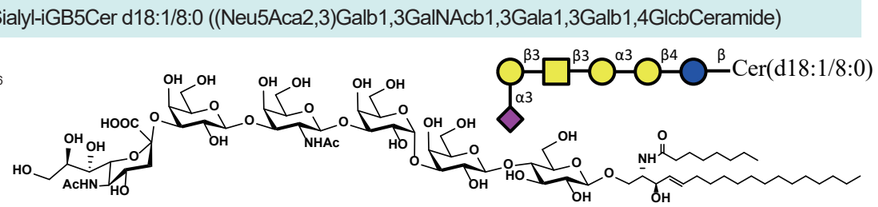
GL-0050 Sialyl-iGB5sph d20:1 ((Neu5Aca2,3)Galb1,3GalNAcb1,3Gala1,3Galb1,4GlcbSphingosine)

M.F.: $C_{63}H_{111}N_3O_{35}$
M.W.: 1470.57
CAS No.: N/A
Package: mg , g



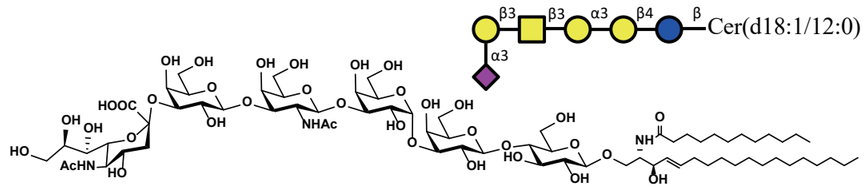
GL-2409 Sialyl-iGB5Cer d18:1/8:0 ((Neu5Aca2,3)Galb1,3GalNAcb1,3Gala1,3Galb1,4GlcbCeramide)

M.F.: $C_{69}H_{121}N_3O_{36}$
M.W.: 1568.71
CAS No.: N/A
Package: mg , g



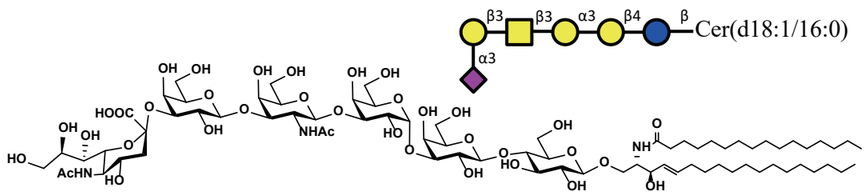
GL-2410 Sialyl-iGB5Cer d18:1/12:0 ((Neu5Aca2,3)Galb1,3GalNAcb1,3Gala1,3Galb1,4GlcbCeramide)

M.F.: $C_{73}H_{129}N_3O_{36}$
M.W.: 1624.82
CAS No.: N/A
Package: mg , g



GL-2411 Sialyl-iGB5Cer d18:1/16:0 ((Neu5Aca2,3)Galb1,3GalNAcb1,3Gala1,3Galb1,4GlcbCeramide)

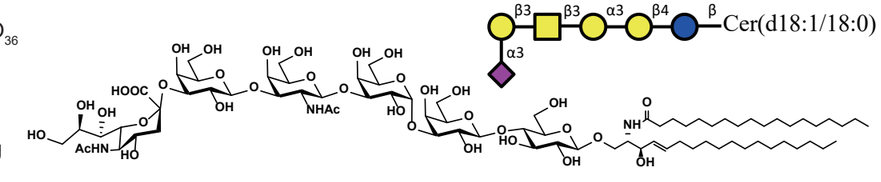
M.F.: $C_{77}H_{137}N_3O_{36}$
M.W.: 1680.93
CAS No.: N/A
Package: mg , g



Red blood cell glycoside series (Sialyl iGb5)

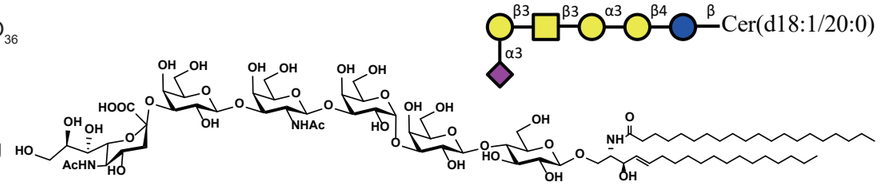
GL-2412 Sialyl-iGB5Cer d18:1/18:0 ((Neu5Aca2,3)Galb1,3GalNAcb1,3Gala1,3Galb1,4GlcbCeramide)

M.F.: $C_{79}H_{141}N_3O_{36}$
M.W.: 1708.98
CAS No.: N/A
Package: mg , g



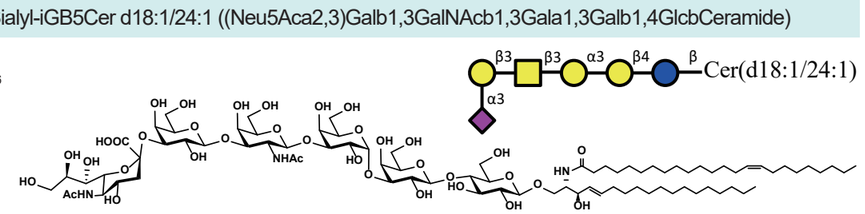
GL-2413 Sialyl-iGB5Cer d18:1/20:0 ((Neu5Aca2,3)Galb1,3GalNAcb1,3Gala1,3Galb1,4GlcbCeramide)

M.F.: $C_{81}H_{145}N_3O_{36}$
M.W.: 1737.04
CAS No.: N/A
Package: mg , g



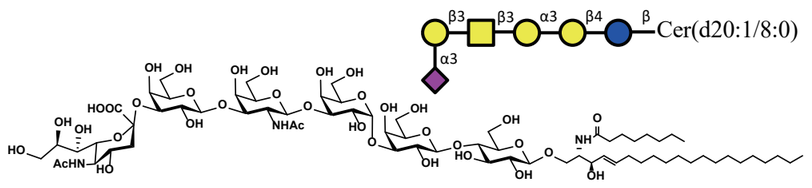
GL-2414 Sialyl-iGB5Cer d18:1/24:1 ((Neu5Aca2,3)Galb1,3GalNAcb1,3Gala1,3Galb1,4GlcbCeramide)

M.F.: $C_{85}H_{151}N_3O_{36}$
M.W.: 1791.13
CAS No.: N/A
Package: mg , g



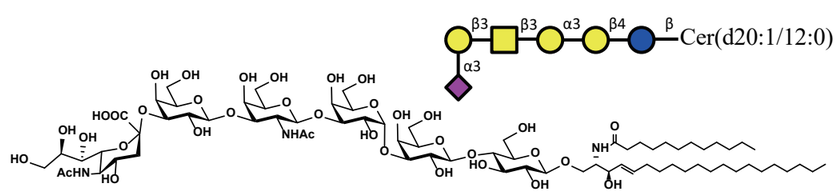
GL-2415 Sialyl-iGB5Cer d20:1/8:0 ((Neu5Aca2,3)Galb1,3GalNAcb1,3Gala1,3Galb1,4GlcbCeramide)

M.F.: $C_{71}H_{125}N_3O_{36}$
M.W.: 1596.77
CAS No.: N/A
Package: mg , g



GL-2416 Sialyl-iGB5Cer d20:1/12:0 ((Neu5Aca2,3)Galb1,3GalNAcb1,3Gala1,3Galb1,4GlcbCeramide)

M.F.: $C_{75}H_{133}N_3O_{36}$
M.W.: 1652.87
CAS No.: N/A
Package: mg , g



Red blood cell glycoside series (Sialyl iGb5)

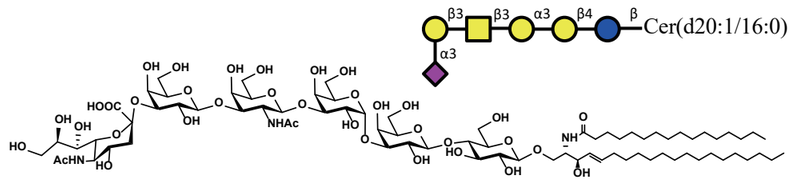
GL-2417 Sialyl-iGB5Cer d20:1/16:0 ((Neu5Aca2,3)Galb1,3GalNAcb1,3Gala1,3Galb1,4GlcbCeramide)

M.F.: $C_{79}H_{141}N_3O_{36}$

M.W.: 1708.98

CAS No.: N/A

Package: mg , g



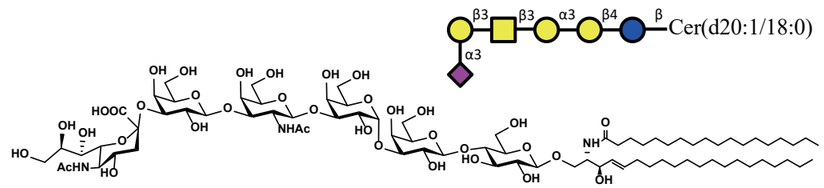
GL-2418 Sialyl-iGB5Cer d20:1/18:0 ((Neu5Aca2,3)Galb1,3GalNAcb1,3Gala1,3Galb1,4GlcbCeramide)

M.F.: $C_{81}H_{145}N_3O_{36}$

M.W.: 1737.04

CAS No.: N/A

Package: mg , g



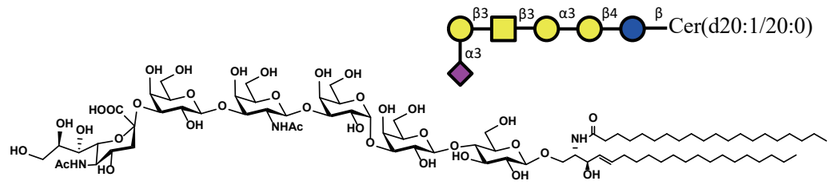
GL-2419 Sialyl-iGB5Cer d20:1/20:0 ((Neu5Aca2,3)Galb1,3GalNAcb1,3Gala1,3Galb1,4GlcbCeramide)

M.F.: $C_{83}H_{149}N_3O_{36}$

M.W.: 1765.09

CAS No.: N/A

Package: mg , g



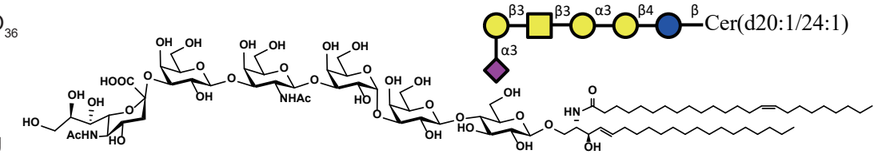
GL-2420 Sialyl-iGB5Cer d20:1/24:1 ((Neu5Aca2,3)Galb1,3GalNAcb1,3Gala1,3Galb1,4GlcbCeramide)

M.F.: $C_{87}H_{155}N_3O_{36}$

M.W.: 1819.18

CAS No.: N/A

Package: mg , g



Ganglio-series

The series of gangliosides is closely related to the development of the nervous system, and the lack of gangliosides can lead to severe neurodegenerative diseases. For example, the lack of GM2 and GD2 will lead to axonal degeneration and defects in sheath formation [*]; Lack of GD3 will lead to thermal hyperalgesia, mechanical pain abnormalities, etc. [* *].

In addition, gangliosides can participate in the regulation of tumor cells. For example, GD1a can inhibit the migration of highly metastatic osteosarcoma cells by inhibiting matrix metal ions [* * *].

Reference:

[*]Sheikh KA, Sun J, et al.. 1999. Proc Natl Acad Sci USA 96, 7532–7537.

[**]Handa Y, et al.. 2005. Pain 117, 271–279.

[***]Hyuga S, et al.. 1997. Biochem Biophys Res Commun 231, 340–343.

Ganglioside series (GM3)

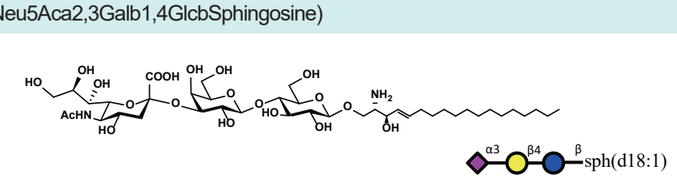
GL-0005 GM3sph d18:1 (Neu5Aca2,3Galb1,4GlcbSphingosine)

M.F.: $C_{41}H_{74}N_2O_{20}$

M.W.: 915.04

CAS No.: N/A

Package: mg , g



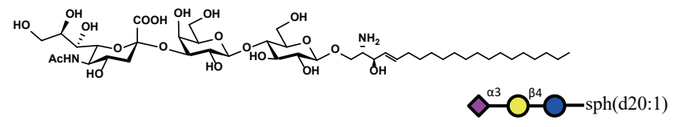
GL-0006 GM3sph d20:1 (Neu5Aca2,3Galb1,4GlcbSphingosine)

M.F.: $C_{43}H_{78}N_2O_{20}$

M.W.: 943.09

CAS No.: N/A

Package: mg , g



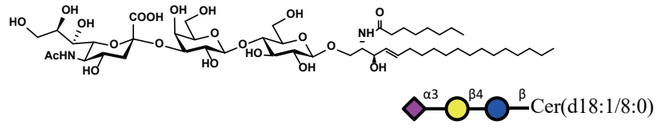
GL-2101 GM3Cer d18:1/8:0 (Neu5Aca2,3Galb1,4GlcbCeramide)

M.F.: $C_{49}H_{88}N_2O_{21}$

M.W.: 1041.24

CAS No.: N/A

Package: mg , g



Ganglioside series (GM3)

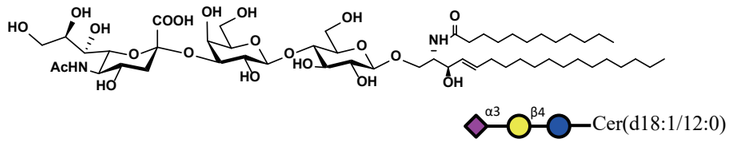
GL-2102 GM3Cer d18:1/12:0 (Neu5Aca2,3Galb1,4GlcbCeramide)

M.F.: $C_{53}H_{96}N_2O_{21}$

M.W.: 1097.34

CAS No.: N/A

Package: mg , g



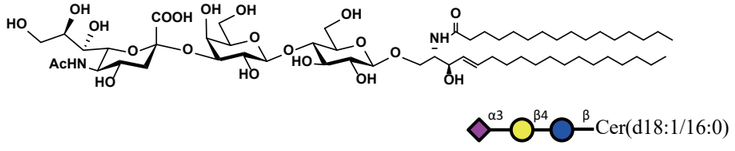
GL-2103 GM3Cer d18:1/16:0 (Neu5Aca2,3Galb1,4GlcbCeramide)

M.F.: $C_{57}H_{104}N_2O_{21}$

M.W.: 1153.45

CAS No.: N/A

Package: mg , g



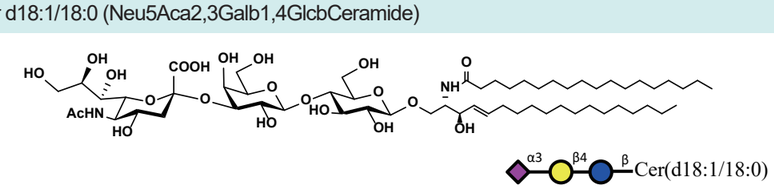
GL-2104 GM3Cer d18:1/18:0 (Neu5Aca2,3Galb1,4GlcbCeramide)

M.F.: $C_{59}H_{108}N_2O_{21}$

M.W.: 1181.51

CAS No.: N/A

Package: mg , g



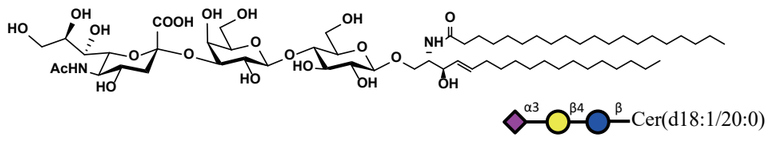
GL-2105 GM3Cer d18:1/20:0 (Neu5Aca2,3Galb1,4GlcbCeramide)

M.F.: $C_{61}H_{112}N_2O_{21}$

M.W.: 1209.56

CAS No.: N/A

Package: mg , g



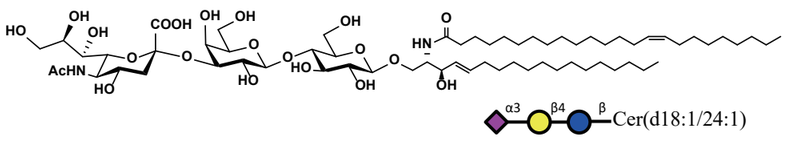
GL-2106 GM3Cer d18:1/24:1 (Neu5Aca2,3Galb1,4GlcbCeramide)

M.F.: $C_{65}H_{118}N_2O_{21}$

M.W.: 1263.65

CAS No.: N/A

Package: mg , g



Ganglioside series (GM3)

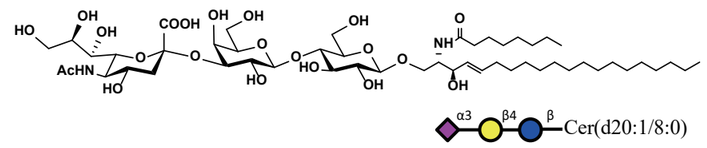
GL-2107 GM3Cer d20:1/8:0 (Neu5Aca2,3Galb1,4GlcbCeramide)

M.F.: $C_{51}H_{92}N_2O_{21}$

M.W.: 1069.29

CAS No.: N/A

Package: mg , g



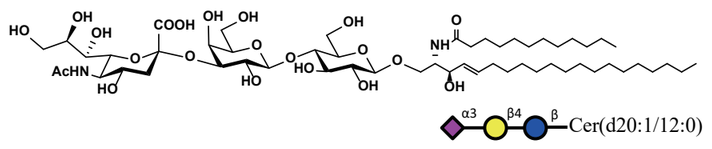
GL-2108 GM3Cer d20:1/12:0 (Neu5Aca2,3Galb1,4GlcbCeramide)

M.F.: $C_{55}H_{100}N_2O_{21}$

M.W.: 1125.40

CAS No.: N/A

Package: mg , g



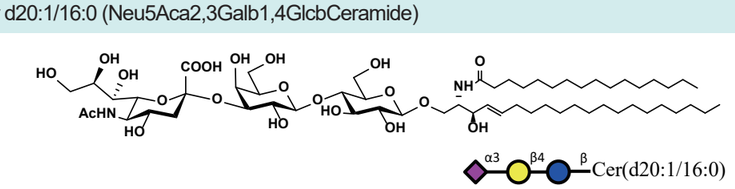
GL-2109 GM3Cer d20:1/16:0 (Neu5Aca2,3Galb1,4GlcbCeramide)

M.F.: $C_{59}H_{108}N_2O_{21}$

M.W.: 1181.51

CAS No.: N/A

Package: mg , g



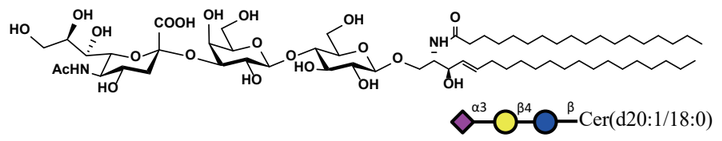
GL-2110 GM3Cer d20:1/18:0 (Neu5Aca2,3Galb1,4GlcbCeramide)

M.F.: $C_{61}H_{112}N_2O_{21}$

M.W.: 1209.56

CAS No.: N/A

Package: mg , g



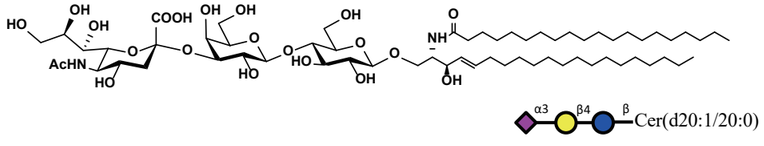
GL-2111 GM3Cer d20:1/20:0 (Neu5Aca2,3Galb1,4GlcbCeramide)

M.F.: $C_{63}H_{116}N_2O_{21}$

M.W.: 1237.61

CAS No.: N/A

Package: mg , g



Ganglioside series (GM3)

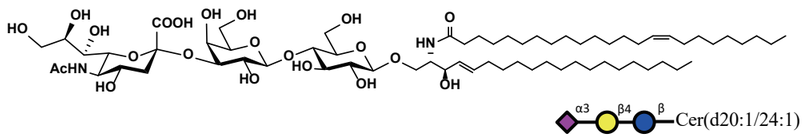
GL-2112 GM3Cer d20:1/24:1 (Neu5Aca2,3Galb1,4GlcbCeramide)

M.F.: $C_{67}H_{122}N_2O_{21}$

M.W.: 1291.71

CAS No.: N/A

Package: mg , g



Ganglioside series(GM2)

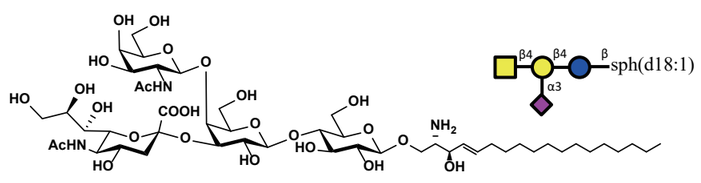
GL-0007 GM2sph d18:1 (GalNAcb1,4(Neu5Aca2,3)Galb1,4GlcbSphingosine)

M.F.: $C_{49}H_{87}N_3O_{25}$

M.W.: 1118.23

CAS No.: N/A

Package: mg , g



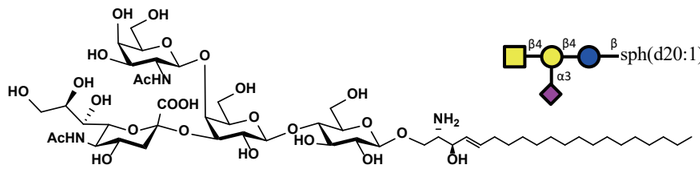
GL-0008 GM2sph d20:1 (GalNAcb1,4(Neu5Aca2,3)Galb1,4GlcbSphingosine)

M.F.: $C_{51}H_{91}N_3O_{25}$

M.W.: 1146.29

CAS No.: N/A

Package: mg , g



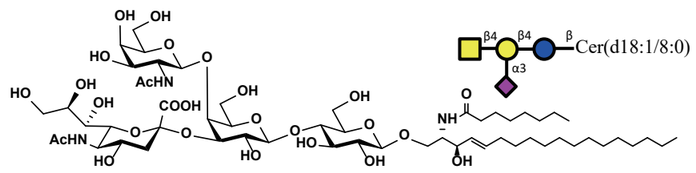
GL-2113 GM2Cer d18:1/8:0 (GalNAcb1,4(Neu5Aca2,3)Galb1,4GlcbCeramide)

M.F.: $C_{57}H_{101}N_3O_{26}$

M.W.: 1244.43

CAS No.: N/A

Package: mg , g



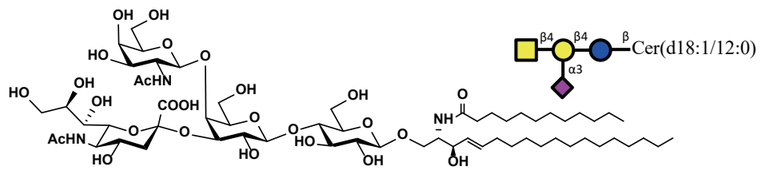
GL-2114 GM2Cer d18:1/12:0 (GalNAcb1,4(Neu5Aca2,3)Galb1,4GlcbCeramide)

M.F.: $C_{61}H_{109}N_3O_{26}$

M.W.: 1300.54

CAS No.: N/A

Package: mg , g



Ganglioside series (GM2)

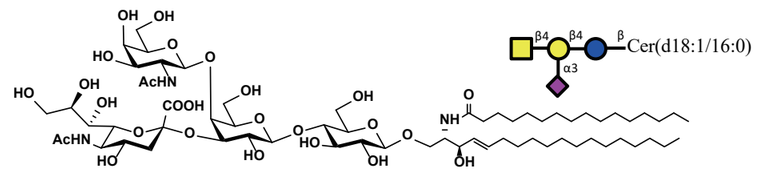
GL-2115 GM2Cer d18:1/16:0 (GalNAcb1,4(Neu5Aca2,3)Galb1,4GlcbCeramide)

M.F.: $C_{65}H_{117}N_3O_{26}$

M.W.: 1356.65

CAS No.: N/A

Package: mg , g



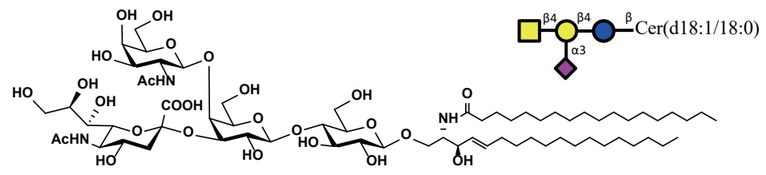
GL-2116 GM2Cer d18:1/18:0 (GalNAcb1,4(Neu5Aca2,3)Galb1,4GlcbCeramide)

M.F.: $C_{67}H_{121}N_3O_{26}$

M.W.: 1384.70

CAS No.: N/A

Package: mg , g



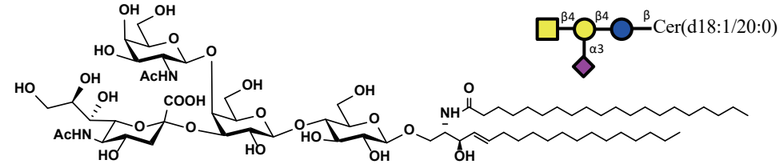
GL-2117 GM2Cer d18:1/20:0 (GalNAcb1,4(Neu5Aca2,3)Galb1,4GlcbCeramide)

M.F.: $C_{69}H_{125}N_3O_{26}$

M.W.: 1412.75

CAS No.: N/A

Package: mg , g



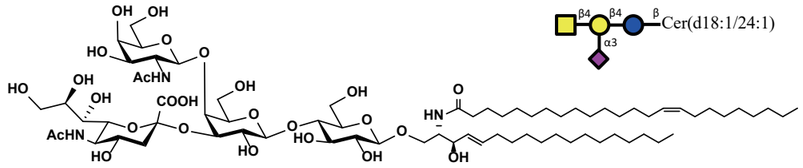
GL-2118 GM2Cer d18:1/24:1 (GalNAcb1,4(Neu5Aca2,3)Galb1,4GlcbCeramide)

M.F.: $C_{73}H_{131}N_3O_{26}$

M.W.: 1466.85

CAS No.: N/A

Package: mg , g



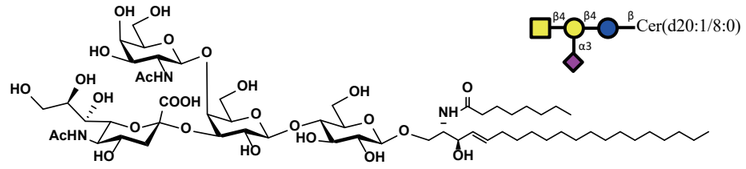
GL-2119 GM2Cer d18:1/8:0 (GalNAcb1,4(Neu5Aca2,3)Galb1,4GlcbCeramide)

M.F.: $C_{59}H_{105}N_3O_{26}$

M.W.: 1272.48

CAS No.: N/A

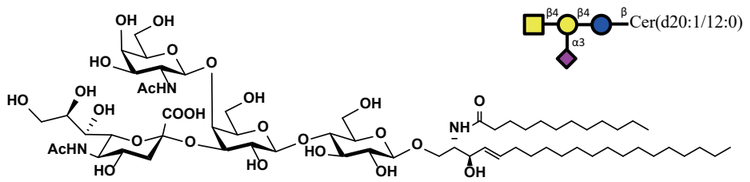
Package: mg , g



Ganglioside series (GM2)

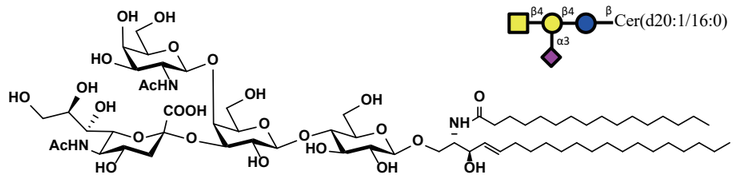
GL-2120 GM2Cer d18:1/12:0 (GalNAcb1,4(Neu5Aca2,3)Galb1,4GlcbCeramide)

M.F.: $C_{63}H_{113}N_3O_{26}$
M.W.: 1328.59
CAS No.: N/A
Package: mg , g



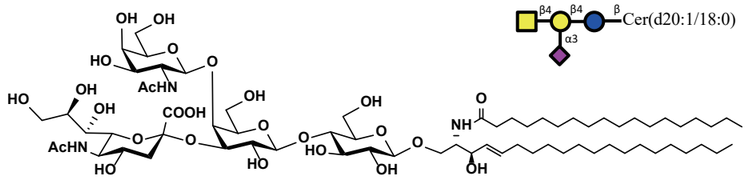
GL-2121 GM2Cer d18:1/16:0 (GalNAcb1,4(Neu5Aca2,3)Galb1,4GlcbCeramide)

M.F.: $C_{67}H_{121}N_3O_{26}$
M.W.: 1384.70
CAS No.: N/A
Package: mg , g



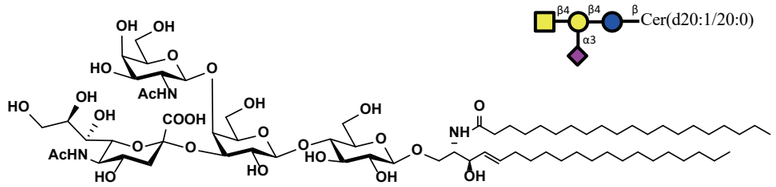
GL-2122 GM2Cer d18:1/18:0 (GalNAcb1,4(Neu5Aca2,3)Galb1,4GlcbCeramide)

M.F.: $C_{69}H_{125}N_3O_{26}$
M.W.: 1412.75
CAS No.: N/A
Package: mg , g



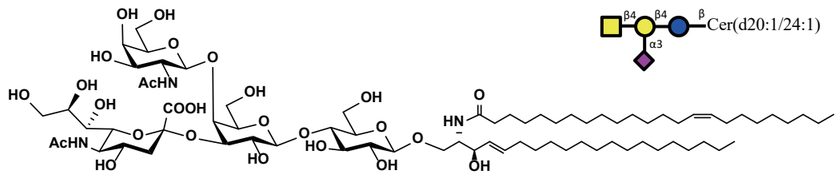
GL-2123 GM2Cer d18:1/20:0 (GalNAcb1,4(Neu5Aca2,3)Galb1,4GlcbCeramide)

M.F.: $C_{71}H_{129}N_3O_{26}$
M.W.: 1440.81
CAS No.: N/A
Package: mg , g



GL-2124 GM2Cer d18:1/24:1 (GalNAcb1,4(Neu5Aca2,3)Galb1,4GlcbCeramide)

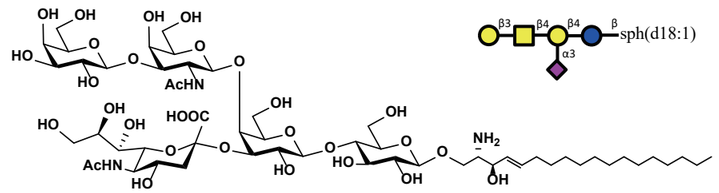
M.F.: $C_{75}H_{135}N_3O_{26}$
M.W.: 1494.90
CAS No.: N/A
Package: mg , g



Ganglioside series (GM1a)

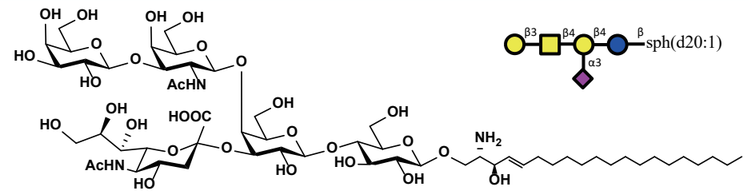
GL-0009 GM1asph d18:1 (Galb1,3GalNAcb1,4(Neu5Aca2,3)Galb1,4GlcbSphingosine)

M.F.: $C_{55}H_{97}N_3O_{30}$
M.W.: 1280.37
CAS No.: N/A
Package: mg to kg



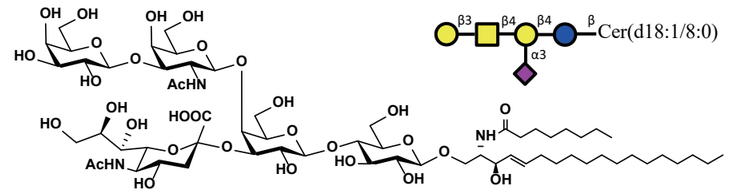
GL-0010 GM1asph d20:1 (Galb1,3GalNAcb1,4(Neu5Aca2,3)Galb1,4GlcbSphingosine)

M.F.: $C_{57}H_{101}N_3O_{30}$
M.W.: 1308.43
CAS No.: N/A
Package: mg to kg



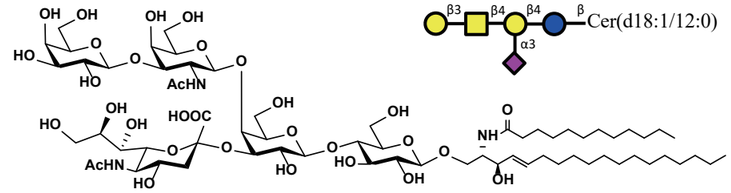
GL-2125 GM1aCer d18:1/8:0 (Galb1,3GalNAcb1,4(Neu5Aca2,3)Galb1,4GlcbCeramide)

M.F.: $C_{63}H_{111}N_3O_{31}$
M.W.: 1406.57
CAS No.: N/A
Package: mg to kg



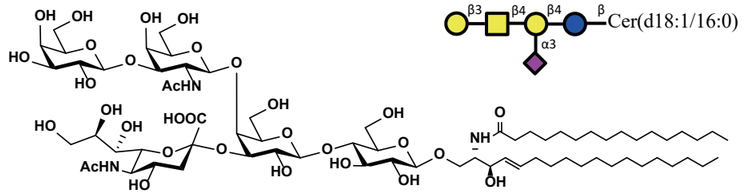
GL-2126 GM1aCer d18:1/12:0 (Galb1,3GalNAcb1,4(Neu5Aca2,3)Galb1,4GlcbCeramide)

M.F.: $C_{67}H_{119}N_3O_{31}$
M.W.: 1462.68
CAS No.: N/A
Package: mg to kg



GL-2127 GM1aCer d18:1/16:0 (Galb1,3GalNAcb1,4(Neu5Aca2,3)Galb1,4GlcbCeramide)

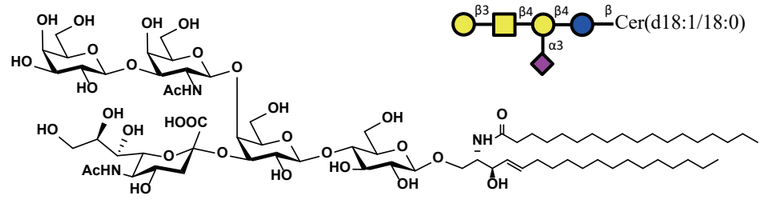
M.F.: $C_{71}H_{127}N_3O_{31}$
M.W.: 1518.79
CAS No.: N/A
Package: mg to kg



Ganglioside series (GM1a)

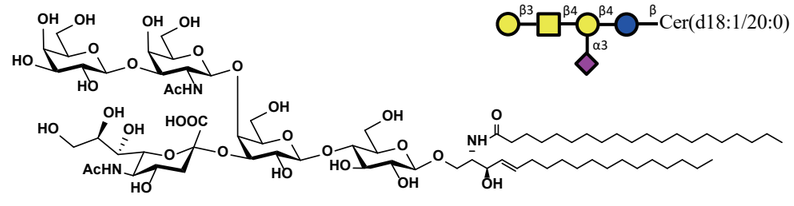
GL-2128 GM1aCer d18:1/18:0 (Galb1,3GalNAcb1,4(Neu5Aca2,3)Galb1,4GlcbCeramide)

M.F.: $C_{73}H_{131}N_3O_{31}$
M.W.: 1546.84
CAS No.: N/A
Package: mg to kg



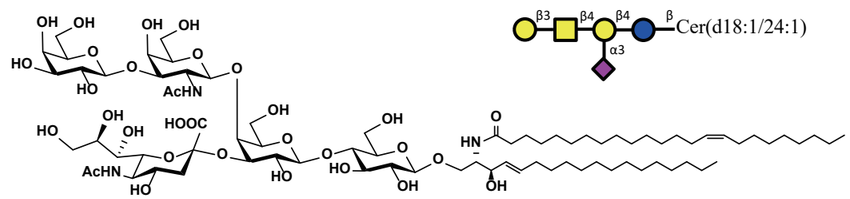
GL-2129 GM1aCer d18:1/20:0 (Galb1,3GalNAcb1,4(Neu5Aca2,3)Galb1,4GlcbCeramide)

M.F.: $C_{75}H_{135}N_3O_{31}$
M.W.: 1574.90
CAS No.: N/A
Package: mg to kg



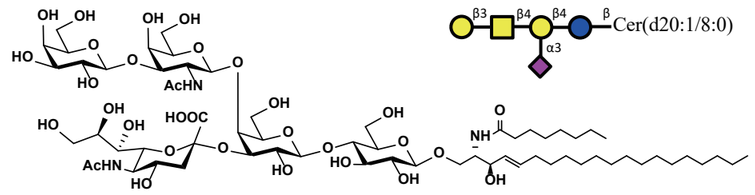
GL-2130 GM1aCer d18:1/24:1 (Galb1,3GalNAcb1,4(Neu5Aca2,3)Galb1,4GlcbCeramide)

M.F.: $C_{79}H_{141}N_3O_{31}$
M.W.: 1628.99
CAS No.: N/A
Package: mg to kg



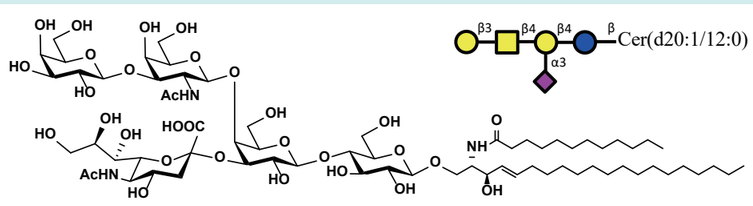
GL-2131 GM1aCer d20:1/8:0 (Galb1,3GalNAcb1,4(Neu5Aca2,3)Galb1,4GlcbCeramide)

M.F.: $C_{65}H_{115}N_3O_{31}$
M.W.: 1434.63
CAS No.: N/A
Package: mg to kg



GL-2132 GM1aCer d20:1/12:0 (Galb1,3GalNAcb1,4(Neu5Aca2,3)Galb1,4GlcbCeramide)

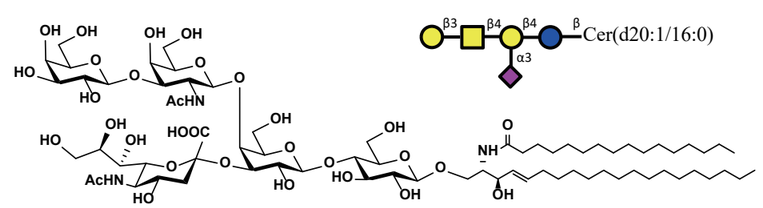
M.F.: $C_{69}H_{123}N_3O_{31}$
M.W.: 1490.73
CAS No.: N/A
Package: mg to kg



Ganglioside series (GM1a)

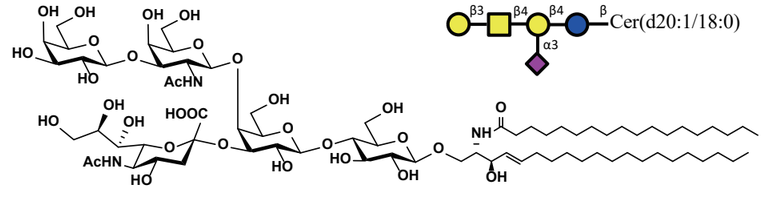
GL-2133 GM1aCer d20:1/16:0 (Galb1,3GalNAcb1,4(Neu5Aca2,3)Galb1,4GlcbCeramide)

M.F.: $C_{73}H_{131}N_3O_{31}$
M.W.: 1546.84
CAS No.: N/A
Package: mg to kg



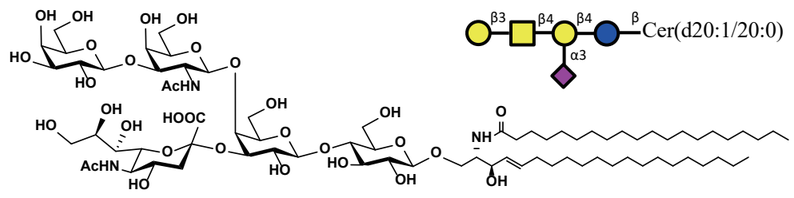
GL-2134 GM1aCer d20:1/18:0 (Galb1,3GalNAcb1,4(Neu5Aca2,3)Galb1,4GlcbCeramide)

M.F.: $C_{75}H_{135}N_3O_{31}$
M.W.: 1574.90
CAS No.: N/A
Package: mg to kg



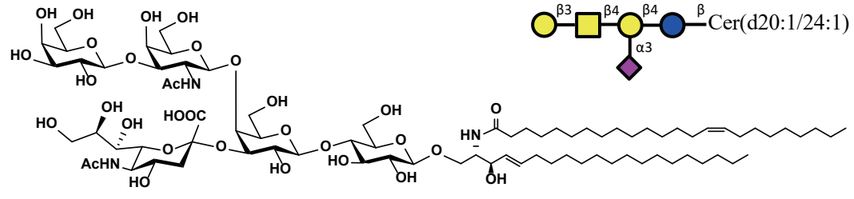
GL-2135 GM1aCer d20:1/20:0 (Galb1,3GalNAcb1,4(Neu5Aca2,3)Galb1,4GlcbCeramide)

M.F.: $C_{77}H_{139}N_3O_{31}$
M.W.: 1602.95
CAS No.: N/A
Package: mg to kg



GL-2136 GM1aCer d20:1/24:1 (Galb1,3GalNAcb1,4(Neu5Aca2,3)Galb1,4GlcbCeramide)

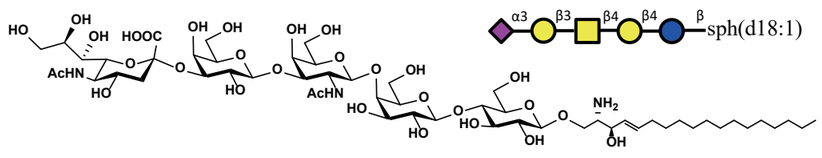
M.F.: $C_{81}H_{145}N_3O_{31}$
M.W.: 1657.04
CAS No.: N/A
Package: mg to kg



Ganglioside series (GM1b)

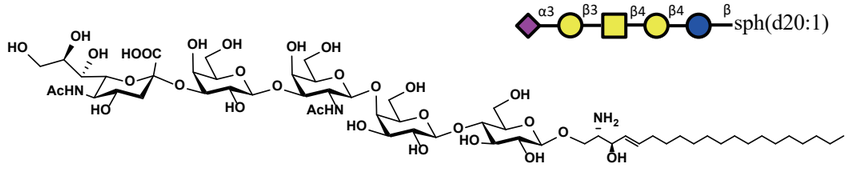
GL-0011 GM1bsph d18:1 (Neu5Aca2,3Galb1,3GalNAcb1,4Galb1,4GlcbSphingosine)

M.F.: $C_{55}H_{97}N_3O_{30}$
M.W.: 1280.37
CAS No.: N/A
Package: mg to kg



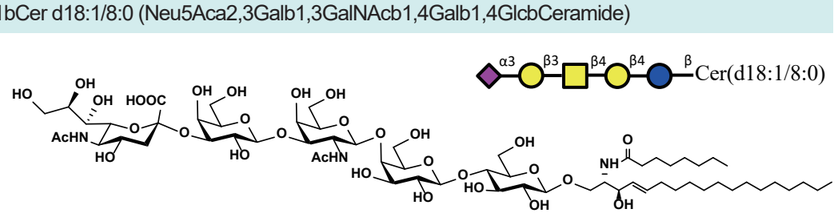
GL-0012 GM1bsph d20:1 (Neu5Aca2,3Galb1,3GalNAcb1,4Galb1,4GlcbSphingosine)

M.F.: $C_{57}H_{101}N_3O_{30}$
M.W.: 1308.43
CAS No.: N/A
Package: mg to kg



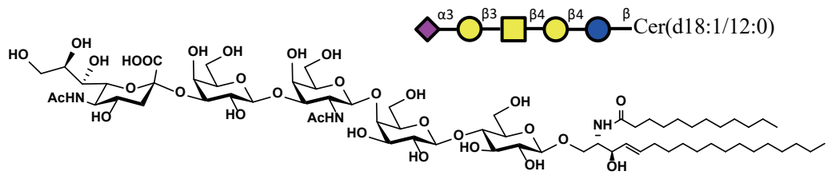
GL-2137 GM1bCer d18:1/8:0 (Neu5Aca2,3Galb1,3GalNAcb1,4Galb1,4GlcbCeramide)

M.F.: $C_{63}H_{111}N_3O_{31}$
M.W.: 1406.57
CAS No.: N/A
Package: mg to kg



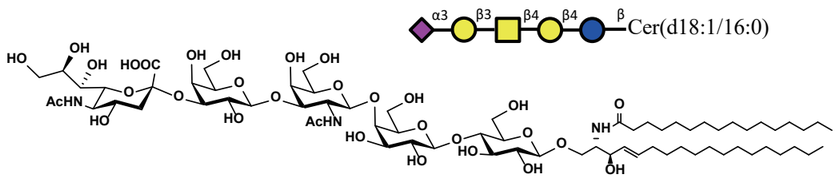
GL-2138 GM1bCer d18:1/12:0 (Neu5Aca2,3Galb1,3GalNAcb1,4Galb1,4GlcbCeramide)

M.F.: $C_{67}H_{119}N_3O_{31}$
M.W.: 1462.68
CAS No.: N/A
Package: mg to kg



GL-2139 GM1bCer d18:1/16:0 (Neu5Aca2,3Galb1,3GalNAcb1,4Galb1,4GlcbCeramide)

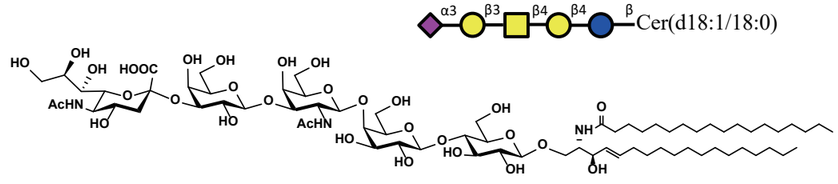
M.F.: $C_{71}H_{127}N_3O_{31}$
M.W.: 1518.79
CAS No.: N/A
Package: mg to kg



Ganglioside series (GM1b)

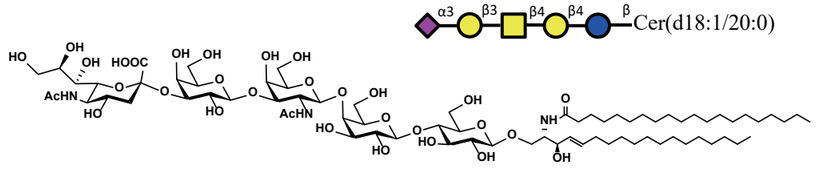
GL-2140 GM1bCer d18:1/18:0 (Neu5Aca2,3Galb1,3GalNAcb1,4Galb1,4GlcbCeramide)

M.F.: $C_{73}H_{131}N_3O_{31}$
M.W.: 1546.84
CAS No.: N/A
Package: mg to kg



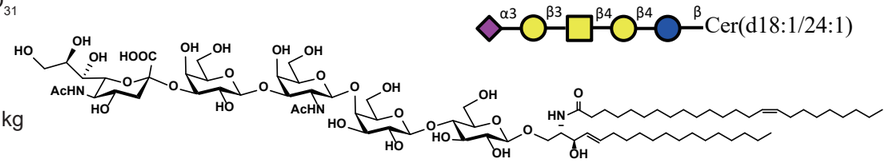
GL-2141 GM1bCer d18:1/20:0 (Neu5Aca2,3Galb1,3GalNAcb1,4Galb1,4GlcbCeramide)

M.F.: $C_{75}H_{135}N_3O_{31}$
M.W.: 1574.90
CAS No.: N/A
Package: mg to kg



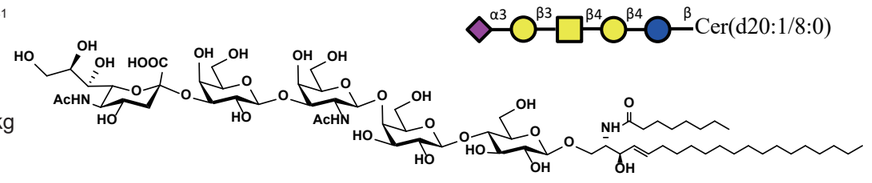
GL-2142 GM1bCer d18:1/24:1 (Neu5Aca2,3Galb1,3GalNAcb1,4Galb1,4GlcbCeramide)

M.F.: $C_{79}H_{141}N_3O_{31}$
M.W.: 1628.99
CAS No.: N/A
Package: mg to kg



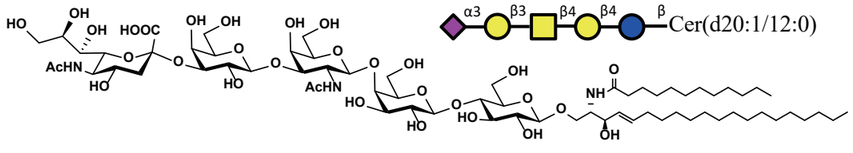
GL-2143 GM1bCer d20:1/8:0 (Neu5Aca2,3Galb1,3GalNAcb1,4Galb1,4GlcbCeramide)

M.F.: $C_{65}H_{115}N_3O_{31}$
M.W.: 1434.63
CAS No.: N/A
Package: mg to kg



GL-2144 GM1bCer d20:1/12:0 (Neu5Aca2,3Galb1,3GalNAcb1,4Galb1,4GlcbCeramide)

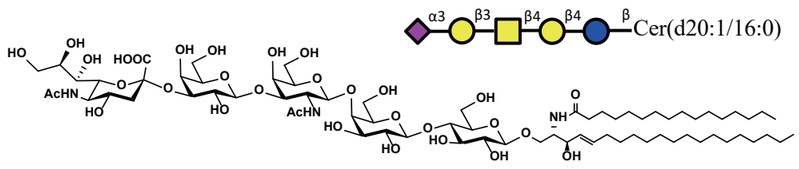
M.F.: $C_{69}H_{123}N_3O_{31}$
M.W.: 1490.73
CAS No.: N/A
Package: mg to kg



Ganglioside series (GM1b)

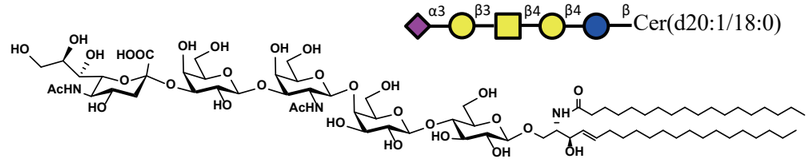
GL-2145 GM1bCer d20:1/16:0 (Neu5Aca2,3Galb1,3GalNAcb1,4Galb1,4GlcbCeramide)

M.F.: $C_{73}H_{131}N_3O_{31}$
M.W.: 1546.84
CAS No.: N/A
Package: mg to kg



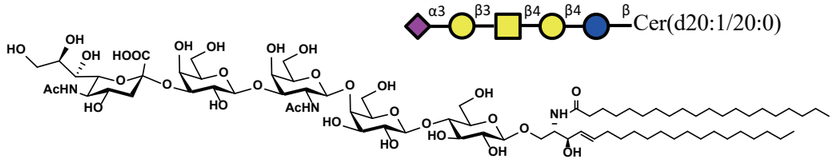
GL-2146 GM1bCer d20:1/18:0 (Neu5Aca2,3Galb1,3GalNAcb1,4Galb1,4GlcbCeramide)

M.F.: $C_{75}H_{135}N_3O_{31}$
M.W.: 1574.90
CAS No.: N/A
Package: mg to kg



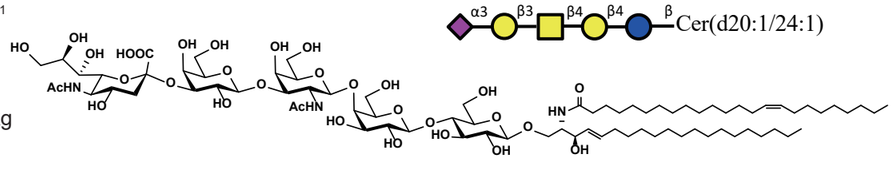
GL-2147 GM1bCer d20:1/20:0 (Neu5Aca2,3Galb1,3GalNAcb1,4Galb1,4GlcbCeramide)

M.F.: $C_{77}H_{139}N_3O_{31}$
M.W.: 1602.95
CAS No.: N/A
Package: mg to kg



GL-2148 GM1bCer d20:1/24:1 (Neu5Aca2,3Galb1,3GalNAcb1,4Galb1,4GlcbCeramide)

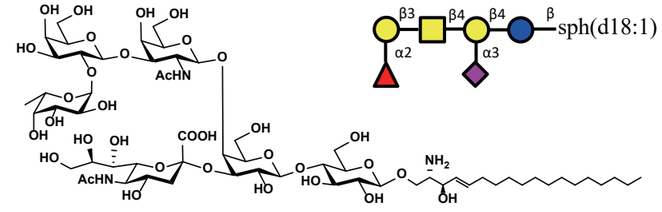
M.F.: $C_{81}H_{145}N_3O_{31}$
M.W.: 1657.04
CAS No.: N/A
Package: mg to kg



Ganglioside series (Fuc-GM1)

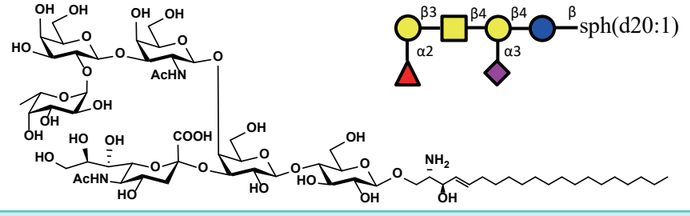
GL-0013 FucGM1sph d18:1 ((Fuca1,2)Galb1,3GalNAcb1,4(Neu5Aca2,3)Galb1,4GlcbSphingosine)

M.F.: $C_{61}H_{107}N_3O_{34}$
M.W.: 1426.51
CAS No.: N/A
Package: mg to kg



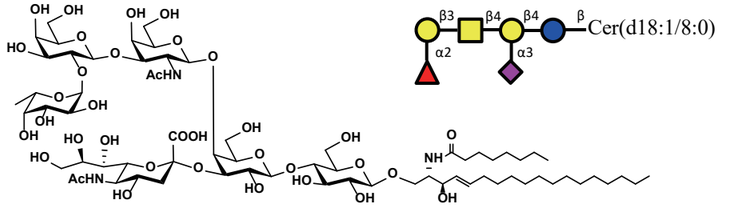
GL-0014 FucGM1sph d20:1 ((Fuca1,2)Galb1,3GalNAcb1,4(Neu5Aca2,3)Galb1,4GlcbSphingosine)

M.F.: $C_{63}H_{111}N_3O_{34}$
M.W.: 1454.57
CAS No.: N/A
Package: mg to kg



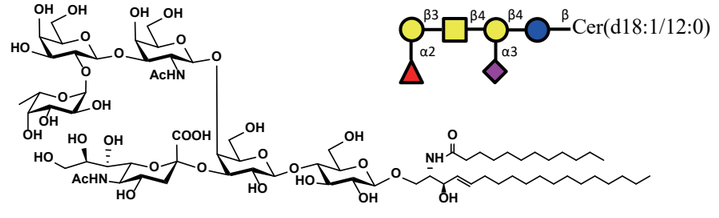
GL-2149 FucGM1Cer d18:1/8:0 ((Fuca1,2)Galb1,3GalNAcb1,4(Neu5Aca2,3)Galb1,4GlcbCeramide)

M.F.: $C_{69}H_{121}N_3O_{35}$
M.W.: 1552.71
CAS No.: N/A
Package: mg to kg



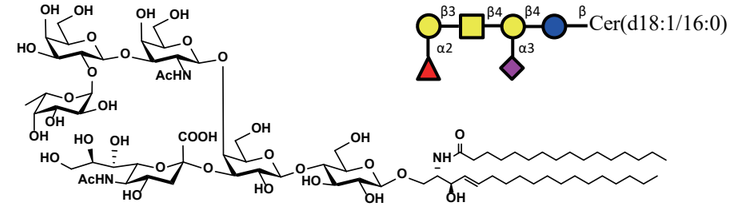
GL-2150 FucGM1Cer d18:1/12:0 ((Fuca1,2)Galb1,3GalNAcb1,4(Neu5Aca2,3)Galb1,4GlcbCeramide)

M.F.: $C_{73}H_{129}N_3O_{35}$
M.W.: 1608.82
CAS No.: N/A
Package: mg to kg



GL-2151 FucGM1Cer d18:1/16:0 ((Fuca1,2)Galb1,3GalNAcb1,4(Neu5Aca2,3)Galb1,4GlcbCeramide)

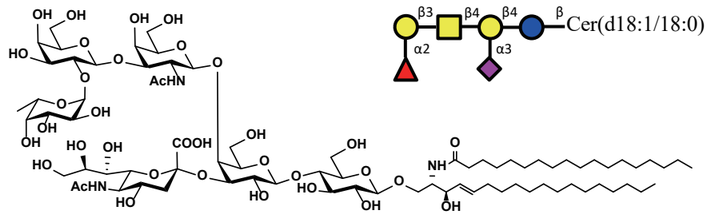
M.F.: $C_{77}H_{137}N_3O_{35}$
M.W.: 1664.93
CAS No.: N/A
Package: mg to kg



Ganglioside series (Fuc-GM1)

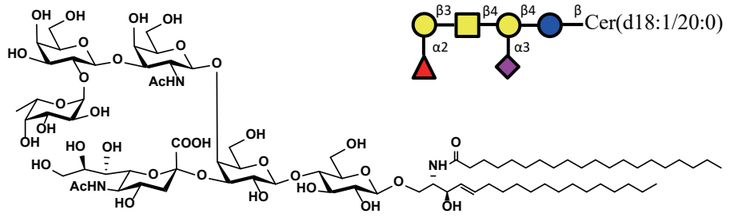
GL-2152 FucGM1Cer d18:1/18:0 ((Fuca1,2)Galb1,3GalNAcb1,4(Neu5Aca2,3)Galb1,4GlcbCeramide)

M.F.: $C_{79}H_{141}N_3O_{35}$
M.W.: 1692.98
CAS No.: N/A
Package: mg to kg



GL-2153 FucGM1Cer d18:1/20:0 ((Fuca1,2)Galb1,3GalNAcb1,4(Neu5Aca2,3)Galb1,4GlcbCeramide)

M.F.: $C_{81}H_{145}N_3O_{35}$
M.W.: 1721.04
CAS No.: N/A
Package: mg to kg

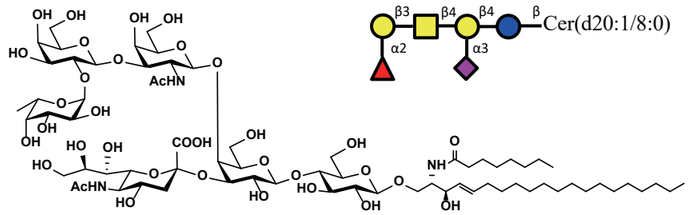


GL-2154 FucGM1Cer d18:1/24:1 ((Fuca1,2)Galb1,3GalNAcb1,4(Neu5Aca2,3)Galb1,4GlcbCeramide)

M.F.: $C_{85}H_{151}N_3O_{35}$
M.W.: 1775.13
CAS No.: N/A
Package: mg to kg

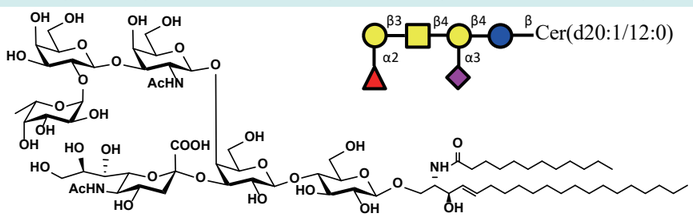
GL-2155 FucGM1Cer d20:1/8:0 ((Fuca1,2)Galb1,3GalNAcb1,4(Neu5Aca2,3)Galb1,4GlcbCeramide)

M.F.: $C_{71}H_{125}N_3O_{35}$
M.W.: 1580.77
CAS No.: N/A
Package: mg to kg



GL-2156 FucGM1Cer d20:1/12:0 ((Fuca1,2)Galb1,3GalNAcb1,4(Neu5Aca2,3)Galb1,4GlcbCeramide)

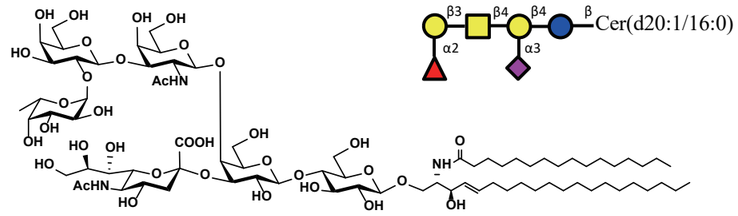
M.F.: $C_{75}H_{133}N_3O_{35}$
M.W.: 1636.88
CAS No.: N/A
Package: mg to kg



Ganglioside series (Fuc-GM1)

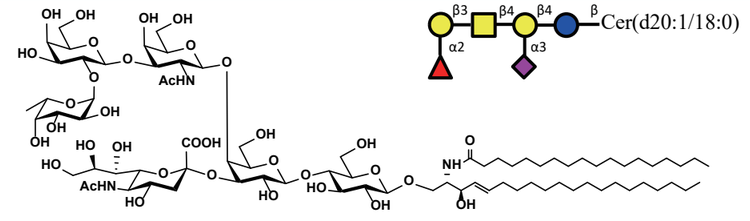
GL-2157 FucGM1Cer d20:1/16:0 ((Fuca1,2)Galb1,3GalNAcb1,4(Neu5Aca2,3)Galb1,4GlcbCeramide)

M.F.: $C_{79}H_{141}N_3O_{35}$
M.W.: 1692.98
CAS No.: N/A
Package: mg to kg



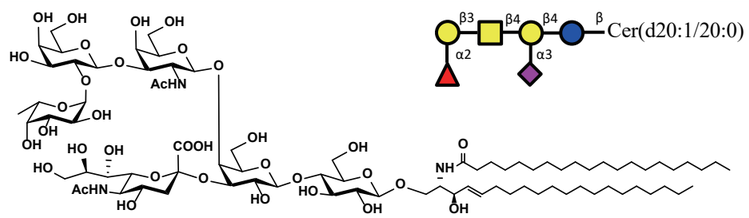
GL-2158 FucGM1Cer d20:1/18:0 ((Fuca1,2)Galb1,3GalNAcb1,4(Neu5Aca2,3)Galb1,4GlcbCeramide)

M.F.: $C_{81}H_{145}N_3O_{35}$
M.W.: 1721.04
CAS No.: N/A
Package: mg to kg



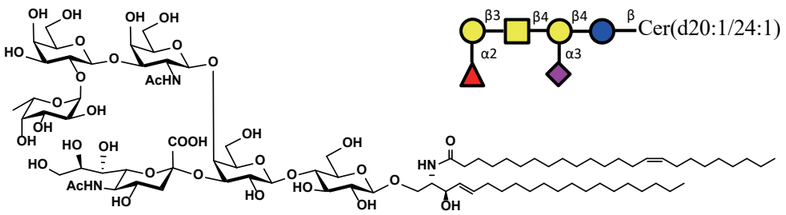
GL-2159 FucGM1Cer d20:1/20:0 ((Fuca1,2)Galb1,3GalNAcb1,4(Neu5Aca2,3)Galb1,4GlcbCeramide)

M.F.: $C_{83}H_{149}N_3O_{35}$
M.W.: 1749.09
CAS No.: N/A
Package: mg to kg



GL-2160 FucGM1Cer d20:1/24:1 ((Fuca1,2)Galb1,3GalNAcb1,4(Neu5Aca2,3)Galb1,4GlcbCeramide)

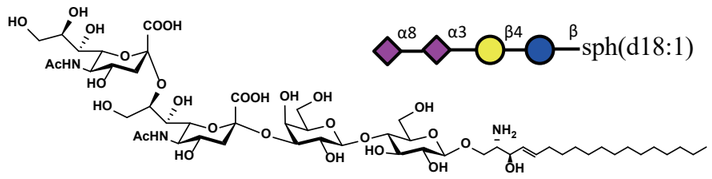
M.F.: $C_{87}H_{155}N_3O_{35}$
M.W.: 1803.18
CAS No.: N/A
Package: mg to kg



Ganglioside series (GD3)

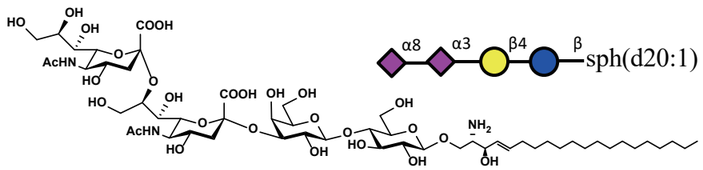
GL-0015 GD3sph d18:1 (Neu5Aca2,8Neu5Aca2,3Galb1,4GlcbSphingosine)

M.F.: $C_{52}H_{91}N_3O_{28}$
M.W.: 1206.29
CAS No.: N/A
Package: mg , g



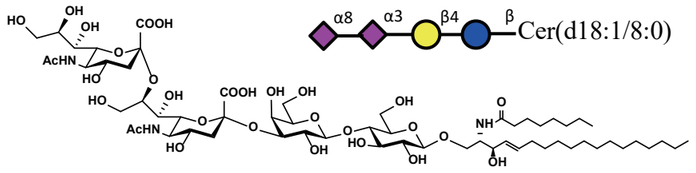
GL-0016 GD3sph d20:1 (Neu5Aca2,8Neu5Aca2,3Galb1,4GlcbSphingosine)

M.F.: $C_{54}H_{95}N_3O_{28}$
M.W.: 1234.35
CAS No.: N/A
Package: mg , g



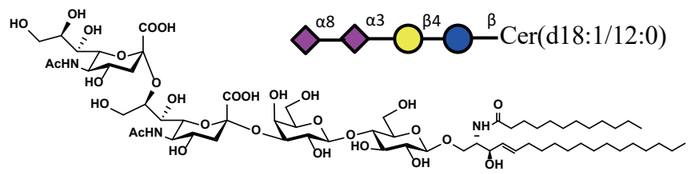
GL-2161 GD3Cer d18:1/8:0 (Neu5Aca2,8Neu5Aca2,3Galb1,4GlcbCeramide)

M.F.: $C_{61}H_{109}N_3O_{29}$
M.W.: 1348.54
CAS No.: N/A
Package: mg , g



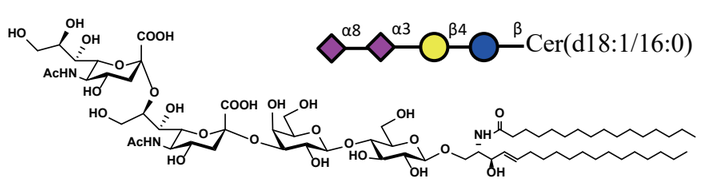
GL-2162 GD3Cer d18:1/12:0 (Neu5Aca2,8Neu5Aca2,3Galb1,4GlcbCeramide)

M.F.: $C_{64}H_{113}N_3O_{29}$
M.W.: 1388.60
CAS No.: N/A
Package: mg , g



GL-2163 GD3Cer d18:1/16:0 (Neu5Aca2,8Neu5Aca2,3Galb1,4GlcbCeramide)

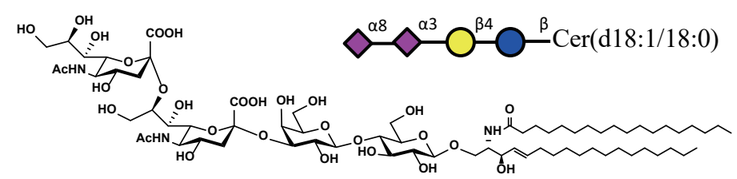
M.F.: $C_{68}H_{121}N_3O_{29}$
M.W.: 1444.71
CAS No.: N/A
Package: mg , g



Ganglioside series (GD3)

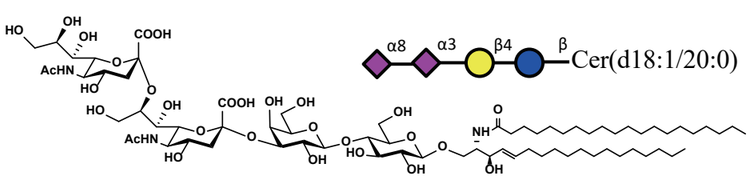
GL-2164 GD3Cer d18:1/18:0 (Neu5Aca2,8Neu5Aca2,3Galb1,4GlcbCeramide)

M.F.: $C_{70}H_{125}N_3O_{29}$
M.W.: 1472.76
CAS No.: N/A
Package: mg , g



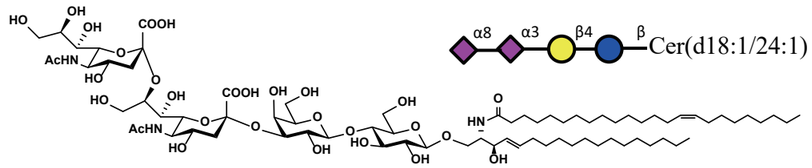
GL-2165 GD3Cer d18:1/20:0 (Neu5Aca2,8Neu5Aca2,3Galb1,4GlcbCeramide)

M.F.: $C_{72}H_{129}N_3O_{29}$
M.W.: 1500.82
CAS No.: N/A
Package: mg , g



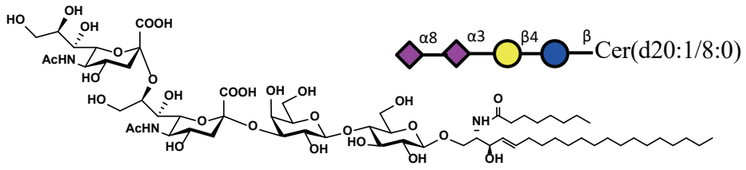
GL-2166 GD3Cer d18:1/24:1 (Neu5Aca2,8Neu5Aca2,3Galb1,4GlcbCeramide)

M.F.: $C_{76}H_{135}N_3O_{29}$
M.W.: 1554.91
CAS No.: N/A
Package: mg , g



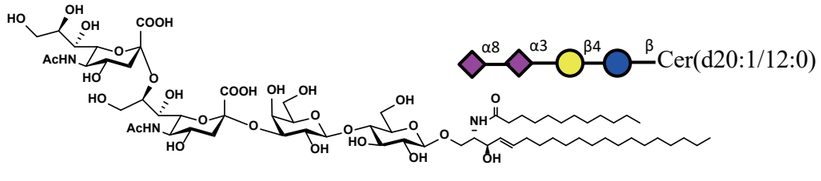
GL-2167 GD3Cer d20:1/8:0 (Neu5Aca2,8Neu5Aca2,3Galb1,4GlcbCeramide)

M.F.: $C_{62}H_{109}N_3O_{29}$
M.W.: 1360.55
CAS No.: N/A
Package: mg , g



GL-2168 GD3Cer d20:1/12:0 (Neu5Aca2,8Neu5Aca2,3Galb1,4GlcbCeramide)

M.F.: $C_{66}H_{117}N_3O_{29}$
M.W.: 1416.65
CAS No.: N/A
Package: mg , g



Ganglioside series (GD3)

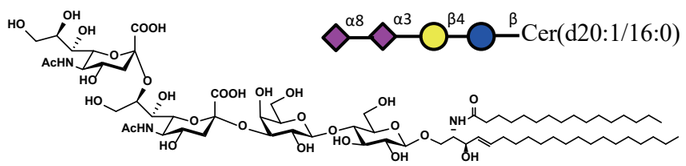
GL-2169 GD3Cer d20:1/16:0 (Neu5Aca2,8Neu5Aca2,3Galb1,4GlcbCeramide)

M.F.: $C_{70}H_{125}N_3O_{29}$

M.W.: 1472.76

CAS No.: N/A

Package: mg , g



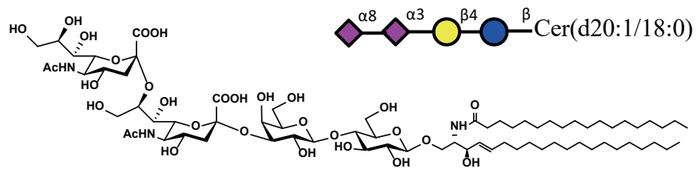
GL-2170 GD3Cer d20:1/18:0 (Neu5Aca2,8Neu5Aca2,3Galb1,4GlcbCeramide)

M.F.: $C_{72}H_{129}N_3O_{29}$

M.W.: 1500.82

CAS No.: N/A

Package: mg , g



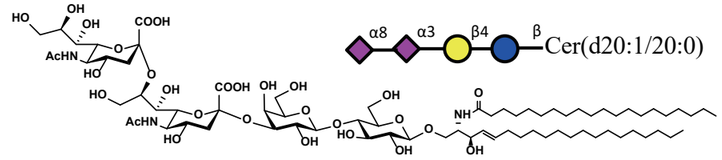
GL-2171 GD3Cer d20:1/20:0 (Neu5Aca2,8Neu5Aca2,3Galb1,4GlcbCeramide)

M.F.: $C_{74}H_{133}N_3O_{29}$

M.W.: 1528.87

CAS No.: N/A

Package: mg , g



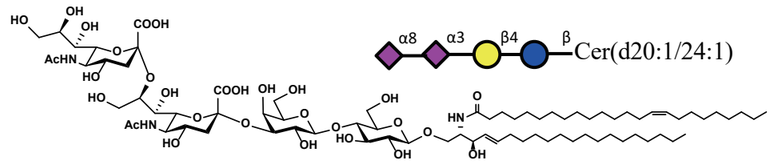
GL-2172 GD3Cer d20:1/24:1 (Neu5Aca2,8Neu5Aca2,3Galb1,4GlcbCeramide)

M.F.: $C_{78}H_{139}N_3O_{29}$

M.W.: 1582.96

CAS No.: N/A

Package: mg to g



Ganglioside series (GD2)

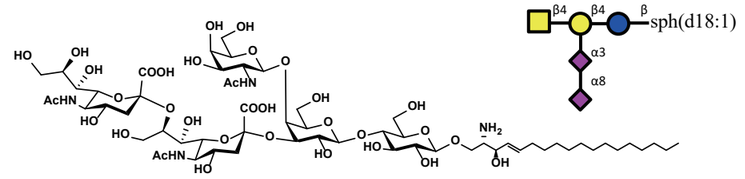
GL-0017 GD2sph d18:1 (GalNAcb1,4(Neu5Aca2,8Neu5Aca2,3)Galb1,4GlcbSphingosine)

M.F.: $C_{60}H_{104}N_4O_{33}$

M.W.: 1409.49

CAS No.: N/A

Package: mg to kg



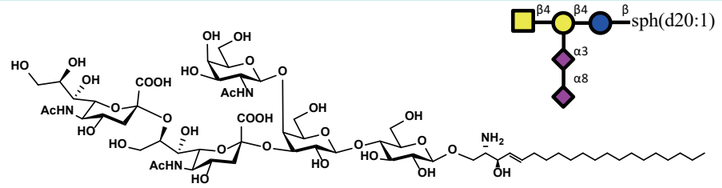
GL-0018 GD2sph d20:1 (GalNAcb1,4(Neu5Aca2,8Neu5Aca2,3)Galb1,4GlcbSphingosine)

M.F.: $C_{62}H_{108}N_4O_{33}$

M.W.: 1437.54

CAS No.: N/A

Package: mg to kg



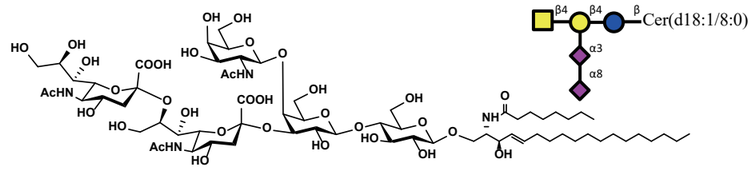
GL-2173 GD2Cer d18:1/8:0 (GalNAcb1,4(Neu5Aca2,8Neu5Aca2,3)Galb1,4GlcbCeramide)

M.F.: $C_{68}H_{118}N_4O_{34}$

M.W.: 1535.69

CAS No.: N/A

Package: mg , g



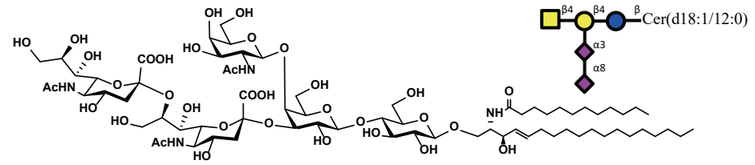
GL-2174 GD2Cer d18:1/12:0 (GalNAcb1,4(Neu5Aca2,8Neu5Aca2,3)Galb1,4GlcbCeramide)

M.F.: $C_{72}H_{126}N_4O_{34}$

M.W.: 1591.79

CAS No.: N/A

Package: mg , g



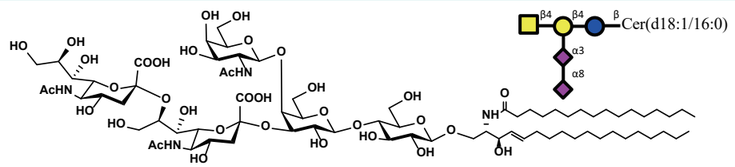
GL-2175 GD2Cer d18:1/16:0 (GalNAcb1,4(Neu5Aca2,8Neu5Aca2,3)Galb1,4GlcbCeramide)

M.F.: $C_{76}H_{134}N_4O_{34}$

M.W.: 1647.90

CAS No.: N/A

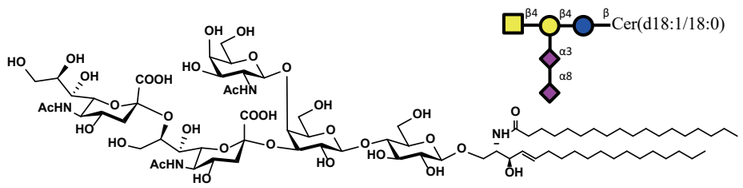
Package: mg , g



Ganglioside series (GD2)

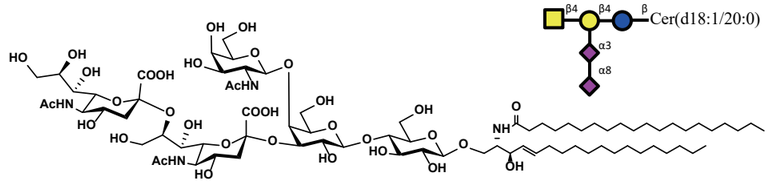
GL-2176 GD2Cer d18:1/18:0 (GalNAcb1,4(Neu5Aca2,8Neu5Aca2,3)Galb1,4GlcbCeramide)

M.F.: $C_{78}H_{138}N_4O_{34}$
M.W.: 1675.96
CAS No.: N/A
Package: mg , g



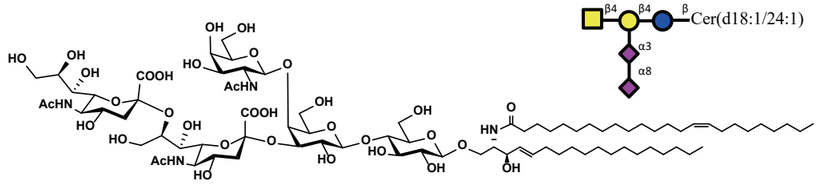
GL-2177 GD2Cer d18:1/20:0 (GalNAcb1,4(Neu5Aca2,8Neu5Aca2,3)Galb1,4GlcbCeramide)

M.F.: $C_{80}H_{142}N_4O_{34}$
M.W.: 1704.01
CAS No.: N/A
Package: mg , g



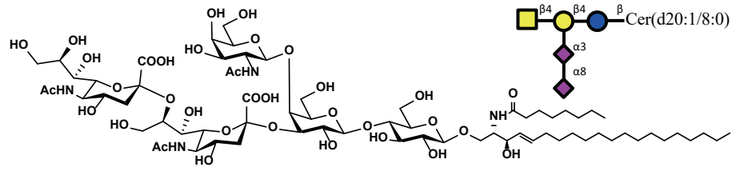
GL-2178 GD2Cer d18:1/24:1 (GalNAcb1,4(Neu5Aca2,8Neu5Aca2,3)Galb1,4GlcbCeramide)

M.F.: $C_{84}H_{148}N_4O_{34}$
M.W.: 1758.10
CAS No.: N/A
Package: mg , g



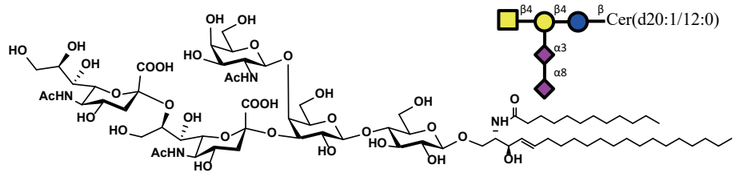
GL-2179 GD2Cer d20:1/8:0 (GalNAcb1,4(Neu5Aca2,8Neu5Aca2,3)Galb1,4GlcbCeramide)

M.F.: $C_{70}H_{122}N_4O_{34}$
M.W.: 1563.74
CAS No.: N/A
Package: mg , g



GL-2180 GD2Cer d20:1/12:0 (GalNAcb1,4(Neu5Aca2,8Neu5Aca2,3)Galb1,4GlcbCeramide)

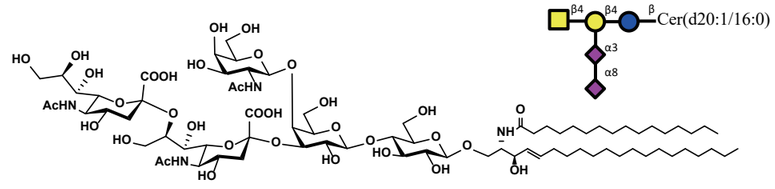
M.F.: $C_{74}H_{130}N_4O_{34}$
M.W.: 1619.85
CAS No.: N/A



Ganglioside series (GD2)

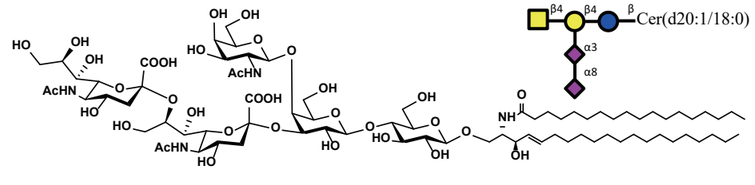
GL-2181 GD2Cer d20:1/16:0 (GalNAcb1,4(Neu5Aca2,8Neu5Aca2,3)Galb1,4GlcbCeramide)

M.F.: $C_{78}H_{138}N_4O_{34}$
M.W.: 1675.96
CAS No.: N/A
Package: mg , g



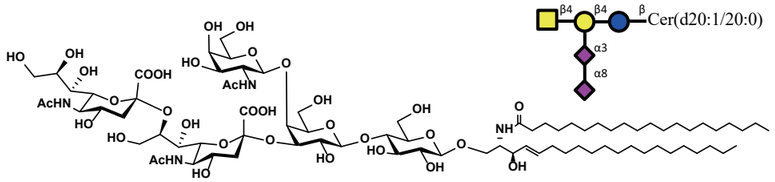
GL-2182 GD2Cer d20:1/18:0 (GalNAcb1,4(Neu5Aca2,8Neu5Aca2,3)Galb1,4GlcbCeramide)

M.F.: $C_{80}H_{142}N_4O_{34}$
M.W.: 1704.01
CAS No.: N/A
Package: mg , g



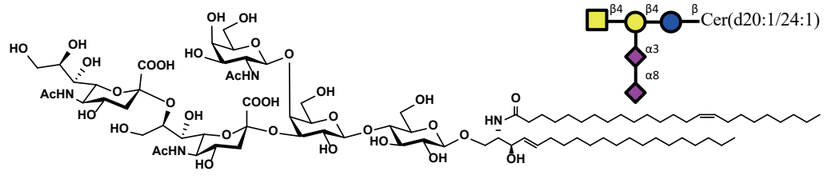
GL-2183 GD2Cer d20:1/20:0 (GalNAcb1,4(Neu5Aca2,8Neu5Aca2,3)Galb1,4GlcbCeramide)

M.F.: $C_{82}H_{146}N_4O_{34}$
M.W.: 1732.06
CAS No.: N/A
Package: mg , g



GL-2184 GD2Cer d20:1/24:1 (GalNAcb1,4(Neu5Aca2,8Neu5Aca2,3)Galb1,4GlcbCeramide)

M.F.: $C_{86}H_{152}N_4O_{34}$
M.W.: 1786.16
CAS No.: N/A
Package: mg , g



Ganglioside series (GD1a)

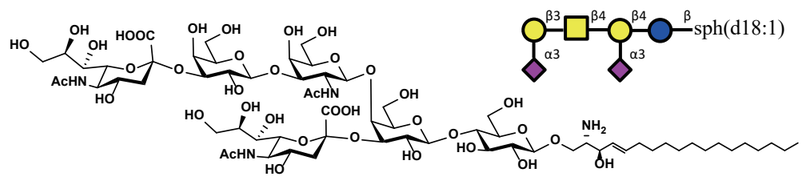
GL-0019 GD1asph d18:1 ((Neu5Aca2,3)Galb1,3GalNAcb1,4(Neu5Aca2,3)Galb1,4GlcbSphingosine)

M.F.: $C_{66}H_{114}N_4O_{38}$

M.W.: 1571.63

CAS No.: N/A

Package: mg , g



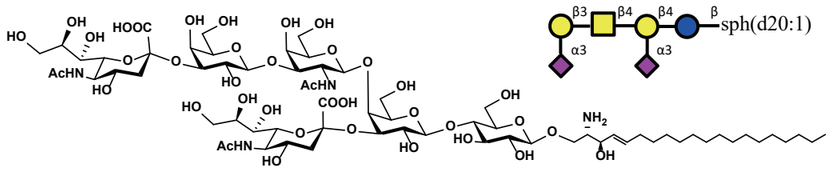
GL-0020 GD1asph d20:1 ((Neu5Aca2,3)Galb1,3GalNAcb1,4(Neu5Aca2,3)Galb1,4GlcbSphingosine)

M.F.: $C_{68}H_{118}N_4O_{38}$

M.W.: 1599.68

CAS No.: N/A

Package: mg , g



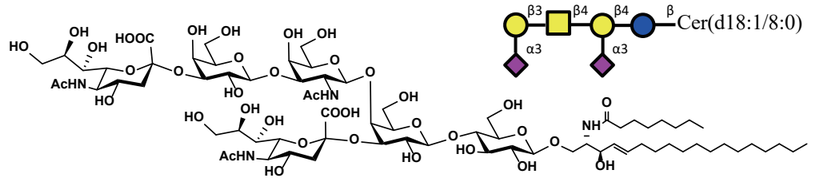
GL-2185 GD1aCer d18:1/8:0 ((Neu5Aca2,3)Galb1,3GalNAcb1,4(Neu5Aca2,3)Galb1,4GlcbCeramide)

M.F.: $C_{74}H_{128}N_4O_{39}$

M.W.: 1697.83

CAS No.: N/A

Package: mg , g



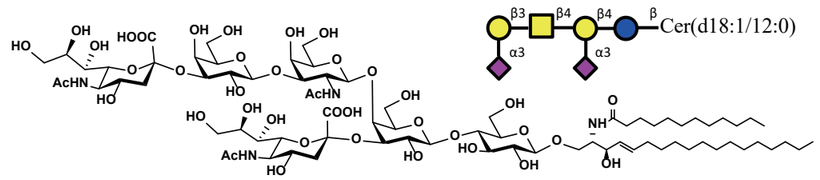
GL-2186 GD1aCer d18:1/12:0 ((Neu5Aca2,3)Galb1,3GalNAcb1,4(Neu5Aca2,3)Galb1,4GlcbCeramide)

M.F.: $C_{78}H_{136}N_4O_{39}$

M.W.: 1753.94

CAS No.: N/A

Package: mg , g



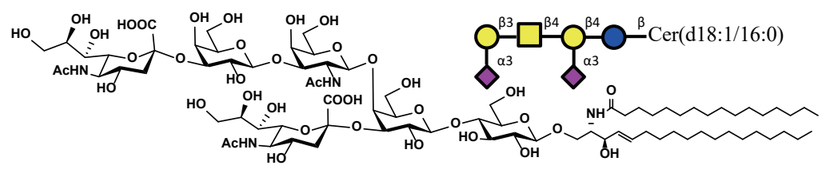
GL-2187 GD1aCer d18:1/16:0 ((Neu5Aca2,3)Galb1,3GalNAcb1,4(Neu5Aca2,3)Galb1,4GlcbCeramide)

M.F.: $C_{82}H_{144}N_4O_{39}$

M.W.: 1810.04

CAS No.: N/A

Package: mg , g



Ganglioside series (GD1a)

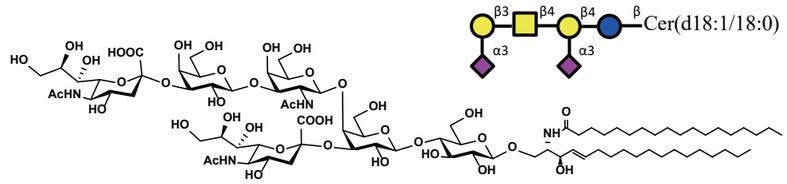
GL-2188 GD1aCer d18:1/18:0 ((Neu5Aca2,3)Galb1,3GalNAcb1,4(Neu5Aca2,3)Galb1,4GlcbCeramide)

M.F.: $C_{84}H_{148}N_4O_{39}$

M.W.: 1838.10

CAS No.: N/A

Package: mg , g



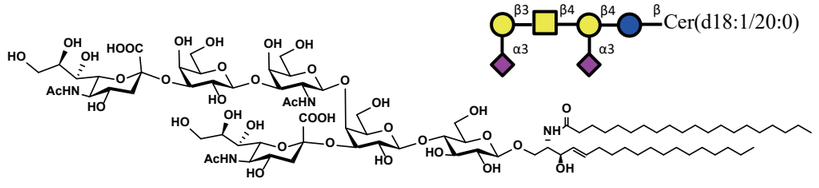
GL-2189 GD1aCer d18:1/20:0 ((Neu5Aca2,3)Galb1,3GalNAcb1,4(Neu5Aca2,3)Galb1,4GlcbCeramide)

M.F.: $C_{86}H_{152}N_4O_{39}$

M.W.: 1866.15

CAS No.: N/A

Package: mg , g



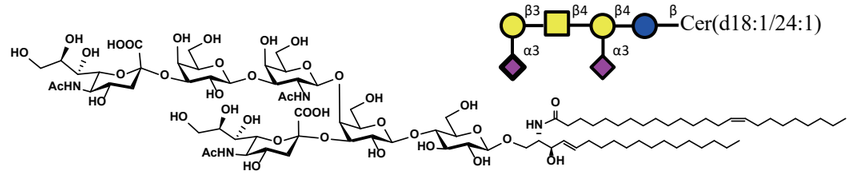
GL-2190 GD1aCer d18:1/24:1 ((Neu5Aca2,3)Galb1,3GalNAcb1,4(Neu5Aca2,3)Galb1,4GlcbCeramide)

M.F.: $C_{90}H_{158}N_4O_{39}$

M.W.: 1920.24

CAS No.: N/A

Package: mg , g



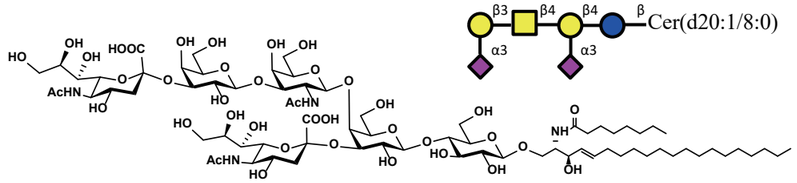
GL-2191 GD1aCer d20:1/8:0 ((Neu5Aca2,3)Galb1,3GalNAcb1,4(Neu5Aca2,3)Galb1,4GlcbCeramide)

M.F.: $C_{76}H_{132}N_4O_{39}$

M.W.: 1725.88

CAS No.: N/A

Package: mg , g



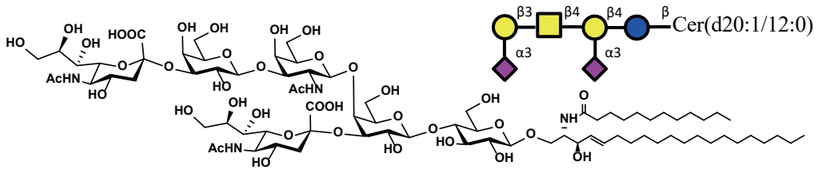
GL-2192 GD1aCer d20:1/12:0 ((Neu5Aca2,3)Galb1,3GalNAcb1,4(Neu5Aca2,3)Galb1,4GlcbCeramide)

M.F.: $C_{80}H_{140}N_4O_{39}$

M.W.: 1781.99

CAS No.: N/A

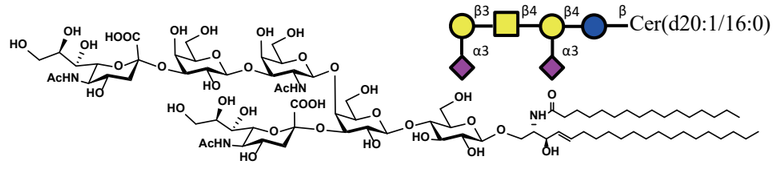
Package: mg , g



Ganglioside series (GD1a)

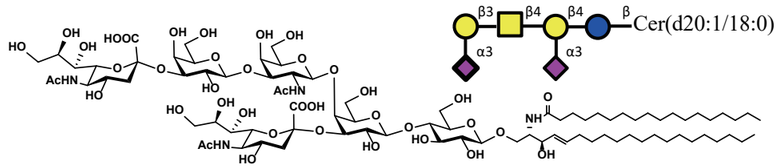
GL-2193 GD1aCer d20:1/16:0 ((Neu5Aca2,3)Galb1,3GalNAcb1,4(Neu5Aca2,3)Galb1,4GlcbCeramide)

M.F.: $C_{84}H_{148}N_4O_{39}$
M.W.: 1838.10
CAS No.: N/A
Package: mg , g



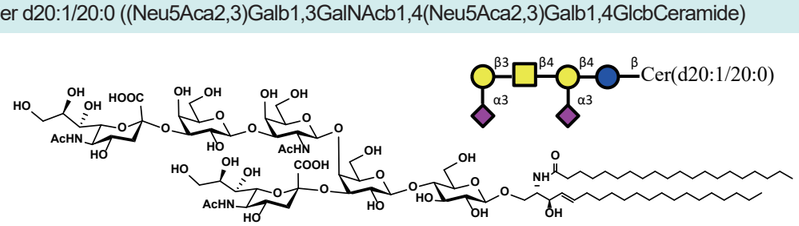
GL-2194 GD1aCer d20:1/18:0 ((Neu5Aca2,3)Galb1,3GalNAcb1,4(Neu5Aca2,3)Galb1,4GlcbCeramide)

M.F.: $C_{86}H_{152}N_4O_{39}$
M.W.: 1866.15
CAS No.: N/A
Package: mg , g



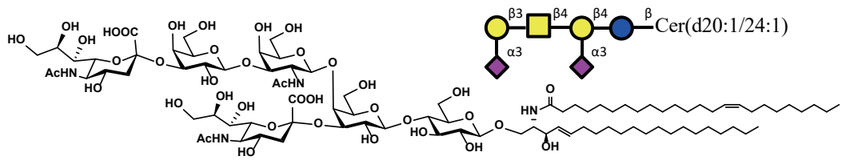
GL-2195 GD1aCer d20:1/20:0 ((Neu5Aca2,3)Galb1,3GalNAcb1,4(Neu5Aca2,3)Galb1,4GlcbCeramide)

M.F.: $C_{88}H_{156}N_4O_{39}$
M.W.: 1894.21
CAS No.: N/A
Package: mg , g



GL-2196 GD1aCer d20:1/24:1 ((Neu5Aca2,3)Galb1,3GalNAcb1,4(Neu5Aca2,3)Galb1,4GlcbCeramide)

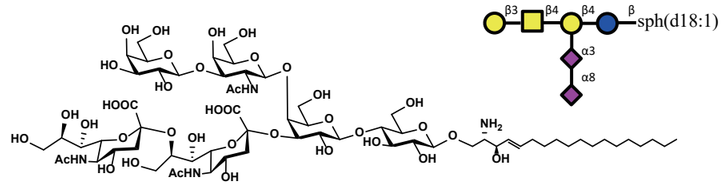
M.F.: $C_{92}H_{162}N_4O_{39}$
M.W.: 1948.30
CAS No.: N/A
Package: mg , g



Ganglioside series (GD1b)

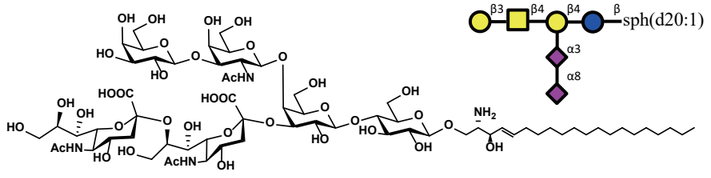
GL-0021 GD1bsph d18:1 (Galb1,3GalNAcb1,4(Neu5Aca2,8Neu5Aca2,3)Galb1,4GlcbSphingosine)

M.F.: $C_{66}H_{114}N_4O_{38}$
M.W.: 1571.63
CAS No.: N/A
Package: mg , g



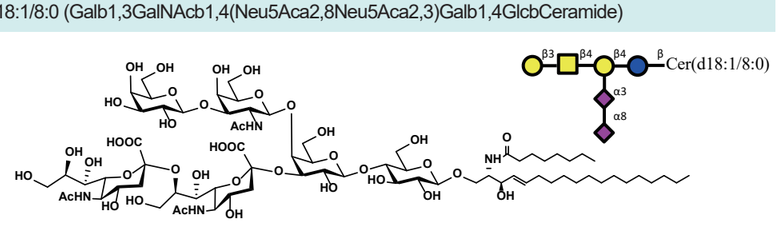
GL-0022 GD1bsph d20:1 (Galb1,3GalNAcb1,4(Neu5Aca2,8Neu5Aca2,3)Galb1,4GlcbSphingosine)

M.F.: $C_{68}H_{118}N_4O_{38}$
M.W.: 1599.68
CAS No.: N/A
Package: mg , g



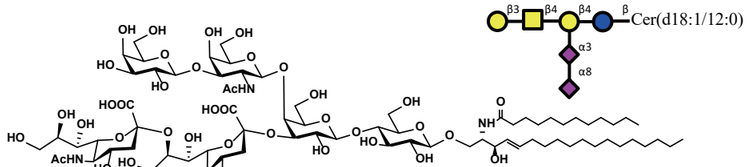
GL-2197 GD1bCer d18:1/8:0 (Galb1,3GalNAcb1,4(Neu5Aca2,8Neu5Aca2,3)Galb1,4GlcbCeramide)

M.F.: $C_{74}H_{128}N_4O_{39}$
M.W.: 1697.83
CAS No.: N/A
Package: mg , g



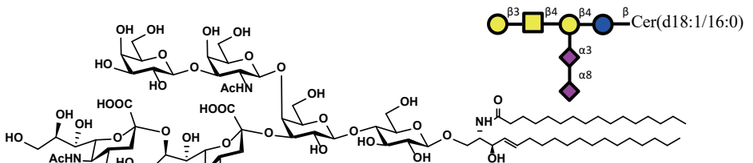
GL-2198 GD1bCer d18:1/12:0 (Galb1,3GalNAcb1,4(Neu5Aca2,8Neu5Aca2,3)Galb1,4GlcbCeramide)

M.F.: $C_{78}H_{136}N_4O_{39}$
M.W.: 1753.94
CAS No.: N/A
Package: mg , g



GL-2199 GD1bCer d18:1/16:0 (Galb1,3GalNAcb1,4(Neu5Aca2,8Neu5Aca2,3)Galb1,4GlcbCeramide)

M.F.: $C_{82}H_{144}N_4O_{39}$
M.W.: 1810.04
CAS No.: N/A
Package: mg , g



Ganglioside series (GD1b)

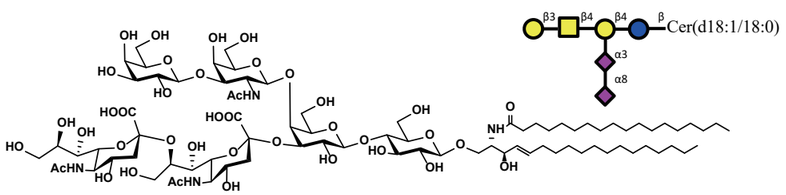
GL-2200 GD1bCer d18:1/18:0 (Galb1,3GalNAcb1,4(Neu5Aca2,8Neu5Aca2,3)Galb1,4GlcbCeramide)

分子式：$C_{84}H_{148}N_4O_{39}$

M.W.: 1838.10

CAS No.: N/A

Package: mg , g



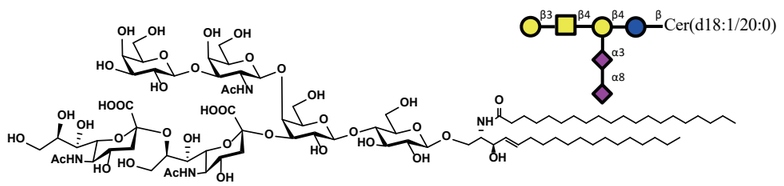
GL-2201 GD1bCer d18:1/20:0 (Galb1,3GalNAcb1,4(Neu5Aca2,8Neu5Aca2,3)Galb1,4GlcbCeramide)

M.F.: $C_{86}H_{152}N_4O_{39}$

M.W.: 1866.15

CAS No.: N/A

Package: mg , g



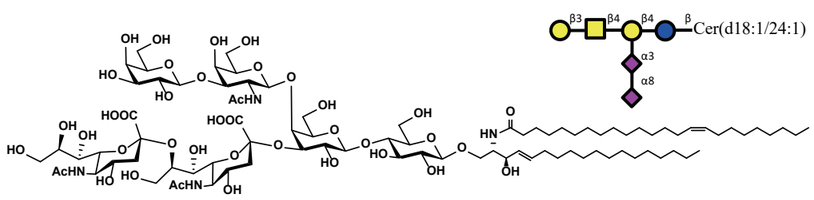
GL-2202 GD1bCer d18:1/24:1 (Galb1,3GalNAcb1,4(Neu5Aca2,8Neu5Aca2,3)Galb1,4GlcbCeramide)

M.F.: $C_{90}H_{158}N_4O_{39}$

M.W.: 1920.24

CAS No.: N/A

Package: mg , g



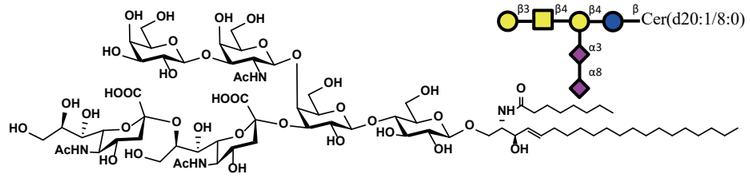
GL-2203 GD1bCer d20:1/8:0 (Galb1,3GalNAcb1,4(Neu5Aca2,8Neu5Aca2,3)Galb1,4GlcbCeramide)

M.F.: $C_{76}H_{132}N_4O_{39}$

M.W.: 1725.88

CAS No.: N/A

Package: mg , g



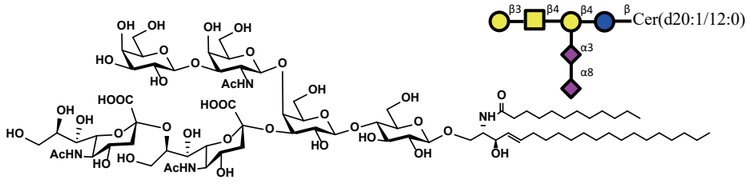
GL-2204 GD1bCer d20:1/12:0 (Galb1,3GalNAcb1,4(Neu5Aca2,8Neu5Aca2,3)Galb1,4GlcbCeramide)

M.F.: $C_{80}H_{140}N_4O_{39}$

M.W.: 1781.99

CAS No.: N/A

Package: mg , g



Ganglioside series (GD1b)

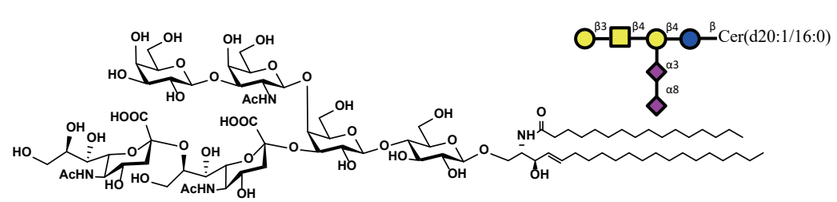
GL-2205 GD1bCer d20:1/16:0 (Galb1,3GalNAcb1,4(Neu5Aca2,8Neu5Aca2,3)Galb1,4GlcbCeramide)

M.F.: $C_{84}H_{148}N_4O_{39}$

M.W.: 1838.10

CAS No.: N/A

Package: mg , g



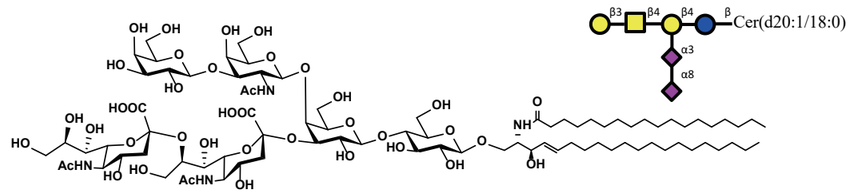
GL-2206 GD1bCer d20:1/18:0 (Galb1,3GalNAcb1,4(Neu5Aca2,8Neu5Aca2,3)Galb1,4GlcbCeramide)

M.F.: $C_{86}H_{152}N_4O_{39}$

M.W.: 1866.15

CAS No.: N/A

Package: mg , g



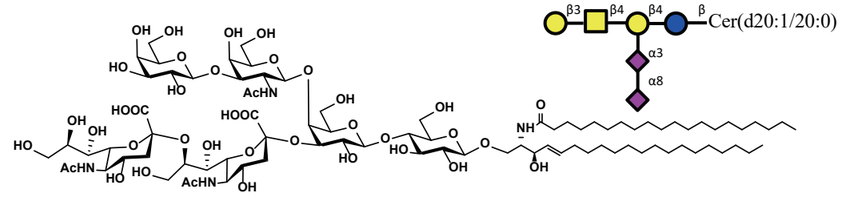
GL-2207 GD1bCer d20:1/20:0 (Galb1,3GalNAcb1,4(Neu5Aca2,8Neu5Aca2,3)Galb1,4GlcbCeramide)

M.F.: $C_{88}H_{156}N_4O_{39}$

M.W.: 1894.21

CAS No.: N/A

Package: mg , g



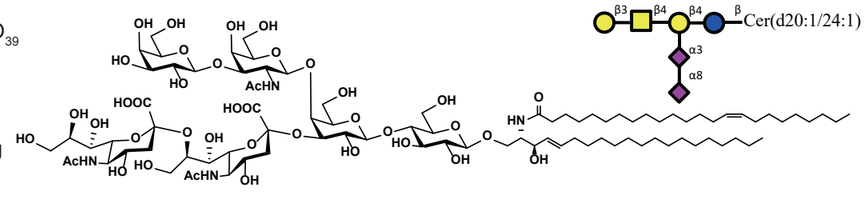
GL-2208 GD1bCer d20:1/24:1 (Galb1,3GalNAcb1,4(Neu5Aca2,8Neu5Aca2,3)Galb1,4GlcbCeramide)

M.F.: $C_{92}H_{162}N_4O_{39}$

M.W.: 1948.30

CAS No.: N/A

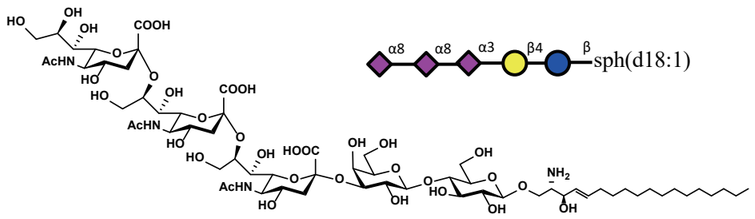
Package: mg , g



Ganglioside series (GT3)

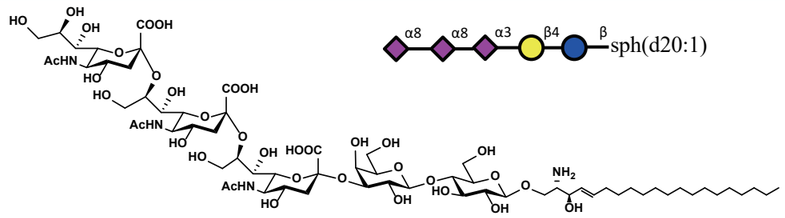
GL-0023 GT3sph d18:1 (Neu5Aca2,8Neu5Aca2,8Neu5Aca2,3Galb1,4GlcbSphingosine)

M.F.: $C_{63}H_{108}N_4O_{36}$
M.W.: 1497.55
CAS No.: N/A
Package: mg , g



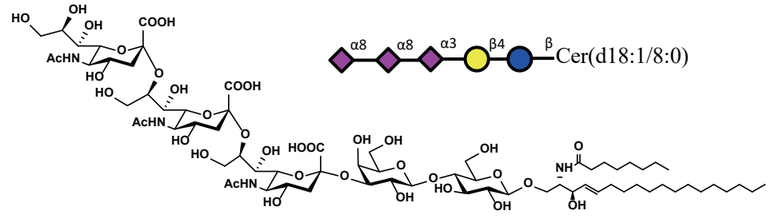
GL-0024 GT3sph d20:1 (Neu5Aca2,8Neu5Aca2,8Neu5Aca2,3Galb1,4GlcbSphingosine)

M.F.: $C_{65}H_{112}N_4O_{36}$
M.W.: 1525.60
CAS No.: N/A
Package: mg , g



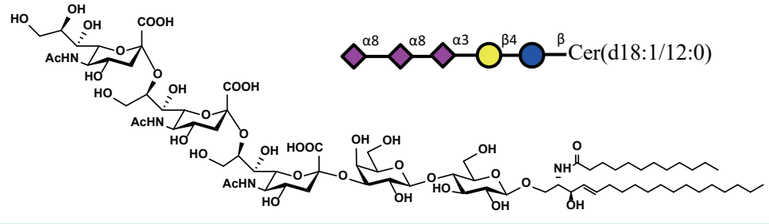
GL-2209 GT3Cer d18:1/8:0 (Neu5Aca2,8Neu5Aca2,8Neu5Aca2,3Galb1,4GlcbCeramide)

M.F.: $C_{71}H_{122}N_4O_{37}$
M.W.: 1623.75
CAS No.: N/A
Package: mg , g



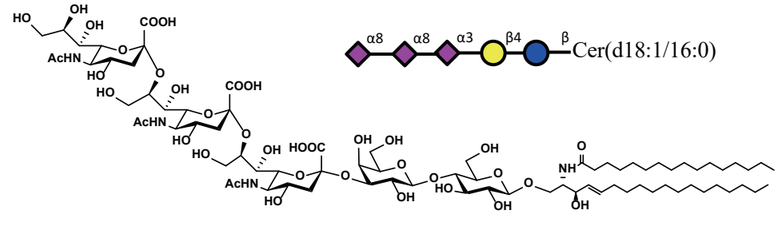
GL-2210 GT3Cer d18:1/12:0 (Neu5Aca2,8Neu5Aca2,8Neu5Aca2,3Galb1,4GlcbCeramide)

M.F.: $C_{75}H_{130}N_4O_{37}$
M.W.: 1679.86
CAS No.: N/A
Package: mg , g



GL-2211 GT3Cer d18:1/16:0 (Neu5Aca2,8Neu5Aca2,8Neu5Aca2,3Galb1,4GlcbCeramide)

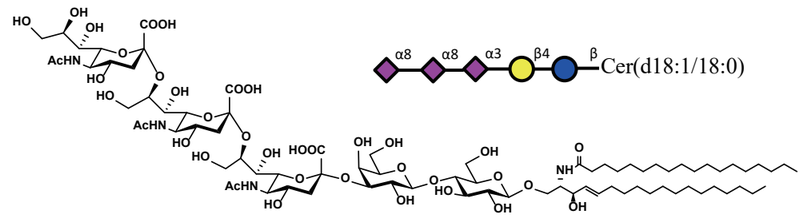
M.F.: $C_{79}H_{138}N_4O_{37}$
M.W.: 1735.96
CAS No.: N/A
Package: mg , g



Ganglioside series (GT3)

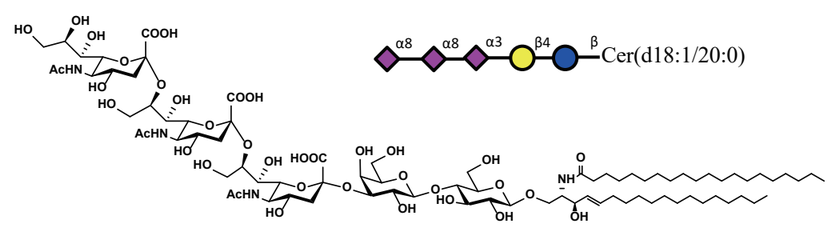
GL-2212 GT3Cer d18:1/18:0 (Neu5Aca2,8Neu5Aca2,8Neu5Aca2,3Galb1,4GlcbCeramide)

M.F.: $C_{81}H_{142}N_4O_{37}$
M.W.: 1764.02
CAS No.: N/A
Package: mg , g



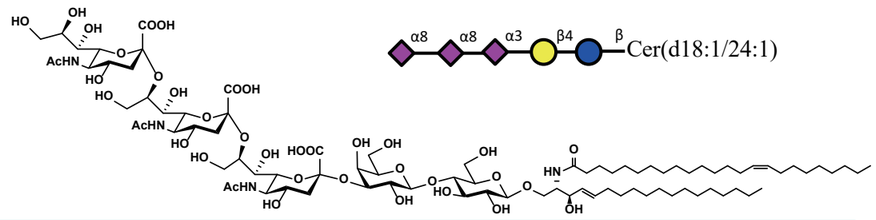
GL-2213 GT3Cer d18:1/20:0 (Neu5Aca2,8Neu5Aca2,8Neu5Aca2,3Galb1,4GlcbCeramide)

M.F.: $C_{83}H_{146}N_4O_{37}$
M.W.: 1792.07
CAS No.: N/A
Package: mg , g



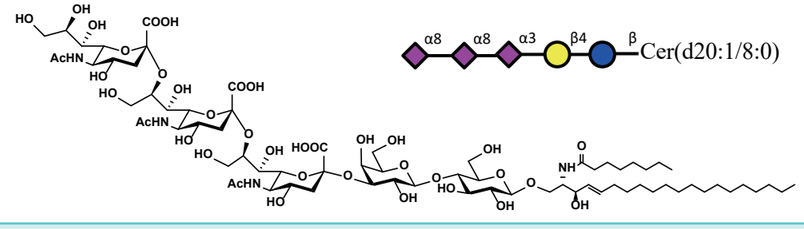
GL-2214 GT3Cer d18:1/24:1 (Neu5Aca2,8Neu5Aca2,8Neu5Aca2,3Galb1,4GlcbCeramide)

M.F.: $C_{87}H_{152}N_4O_{37}$
M.W.: 1846.16
CAS No.: N/A
Package: mg , g



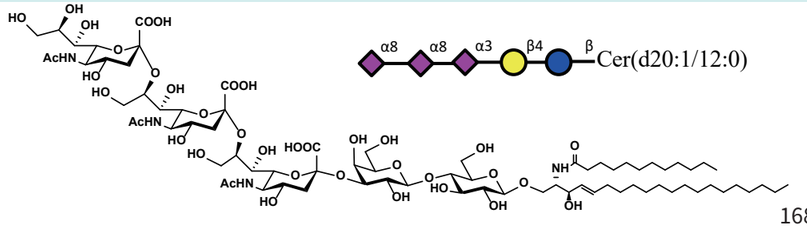
GL-2215 GT3Cer d20:1/8:0 (Neu5Aca2,8Neu5Aca2,8Neu5Aca2,3Galb1,4GlcbCeramide)

M.F.: $C_{73}H_{126}N_4O_{37}$
M.W.: 1651.80
CAS No.: N/A
Package: mg , g



GL-2216 GT3Cer d20:1/12:0 (Neu5Aca2,8Neu5Aca2,8Neu5Aca2,3Galb1,4GlcbCeramide)

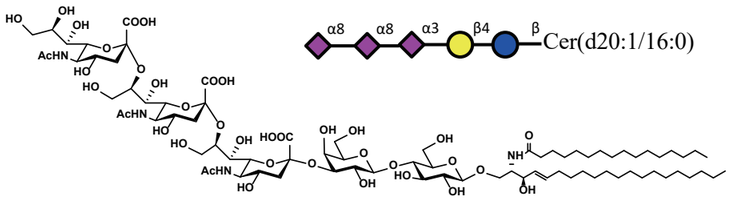
M.F.: $C_{77}H_{134}N_4O_{37}$
M.W.: 1707.91
CAS No.: N/A
Package: mg , g



Ganglioside series (GT3)

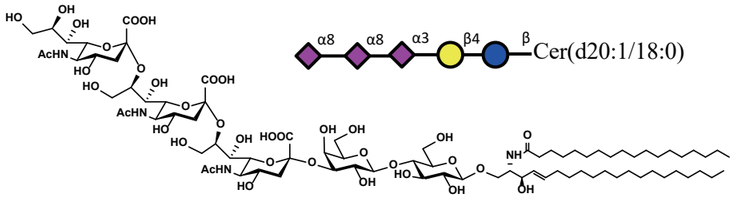
GL-2217 GT3Cer d20:1/16:0 (Neu5Aca2,8Neu5Aca2,8Neu5Aca2,3Galb1,4GlcbCeramide)

M.F.: $C_{81}H_{142}N_4O_{37}$
M.W.: 1764.02
CAS No.: N/A
Package: mg , g



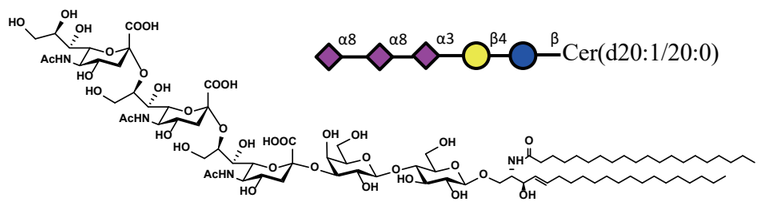
GL-2218 GT3Cer d20:1/18:0 (Neu5Aca2,8Neu5Aca2,8Neu5Aca2,3Galb1,4GlcbCeramide)

M.F.: $C_{83}H_{146}N_4O_{37}$
M.W.: 1792.07
CAS No.: N/A
Package: mg , g



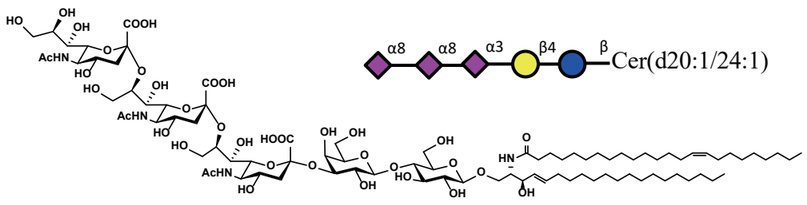
GL-2219 GT3Cer d20:1/20:0 (Neu5Aca2,8Neu5Aca2,8Neu5Aca2,3Galb1,4GlcbCeramide)

M.F.: $C_{85}H_{150}N_4O_{37}$
M.W.: 1820.13
CAS No.: N/A
Package: mg , g



GL-2220 GT3Cer d20:1/24:1 (Neu5Aca2,8Neu5Aca2,8Neu5Aca2,3Galb1,4GlcbCeramide)

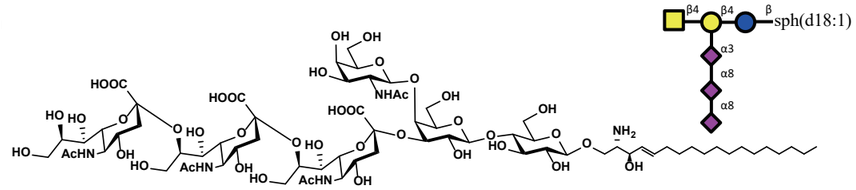
M.F.: $C_{89}H_{156}N_4O_{37}$
M.W.: 1874.22
CAS No.: N/A
Package: mg , g



Ganglioside series (GT2)

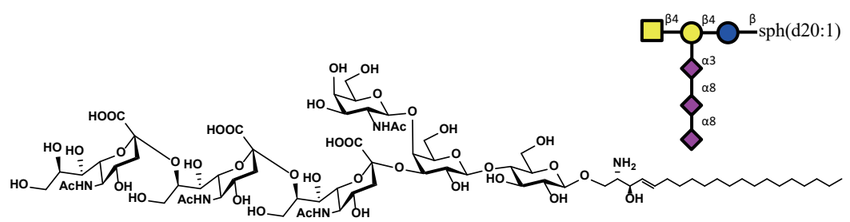
GL-0025 GT2sph d18:1 (GalNAcb1,4(Neu5Aca2,8Neu5Aca2,8Neu5Aca2,3)Galb1,4GlcbSphingosine)

M.F.: $C_{71}H_{121}N_5O_{41}$
M.W.: 1700.74
CAS No.: N/A
Package: mg , g



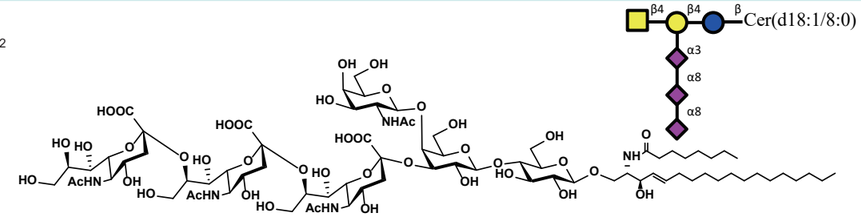
GL-0026 GT2sph d20:1 (GalNAcb1,4(Neu5Aca2,8Neu5Aca2,8Neu5Aca2,3)Galb1,4GlcbSphingosine)

M.F.: $C_{73}H_{125}N_5O_{41}$
M.W.: 1728.80
CAS No.: N/A
Package: mg , g



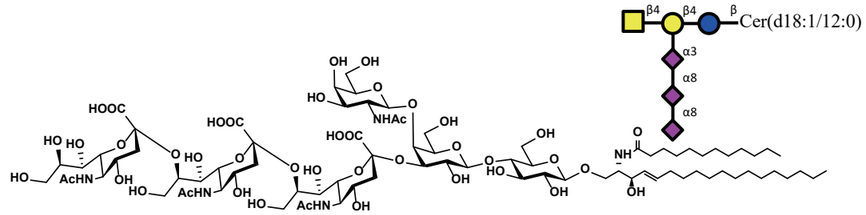
GL-2221 GT2Cer d18:1/8:0 (GalNAcb1,4(Neu5Aca2,8Neu5Aca2,8Neu5Aca2,3)Galb1,4GlcbCeramide)

M.F.: $C_{79}H_{138}N_5O_{42}$
M.W.: 1826.94
CAS No.: N/A
Package: mg , g



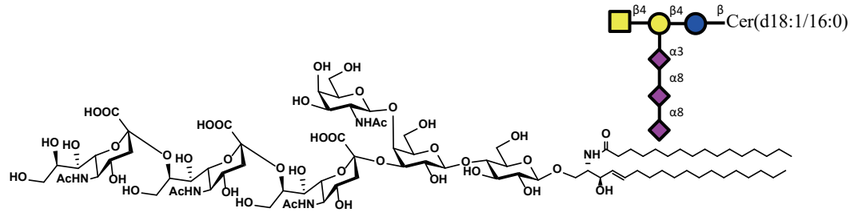
GL-2222 GT2Cer d18:1/12:0 (GalNAcb1,4(Neu5Aca2,8Neu5Aca2,8Neu5Aca2,3)Galb1,4GlcbCeramide)

M.F.: $C_{83}H_{143}N_5O_{42}$
M.W.: 1883.05
CAS No.: N/A
Package: mg , g



GL-2223 GT2Cer d18:1/16:0 (GalNAcb1,4(Neu5Aca2,8Neu5Aca2,8Neu5Aca2,3)Galb1,4GlcbCeramide)

M.F.: $C_{87}H_{151}N_5O_{42}$
M.W.: 1939.16
CAS No.: N/A
Package: mg , g



Ganglioside series (GT2)

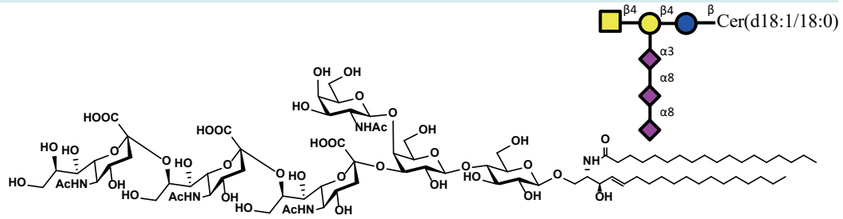
GL-2224 GT2Cer d18:1/18:0 (GalNAcb1,4(Neu5Aca2,8Neu5Aca2,8Neu5Aca2,3)Galb1,4GlcbCeramide)

M.F.: $C_{89}H_{155}N_5O_{42}$

M.W.: 1967.21

CAS No.: N/A

Package: mg , g



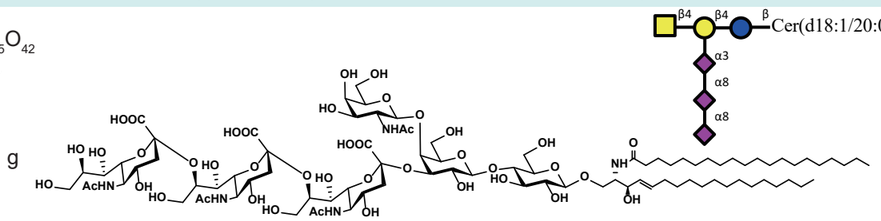
GL-2225 GT2Cer d18:1/20:0 (GalNAcb1,4(Neu5Aca2,8Neu5Aca2,8Neu5Aca2,3)Galb1,4GlcbCeramide)

M.F.: $C_{91}H_{159}N_5O_{42}$

M.W.: 1995.27

CAS No.: N/A

Package: mg , g



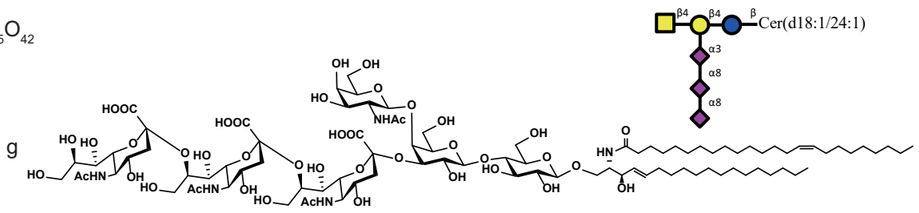
GL-2226 GT2Cer d18:1/24:1 (GalNAcb1,4(Neu5Aca2,8Neu5Aca2,8Neu5Aca2,3)Galb1,4GlcbCeramide)

M.F.: $C_{95}H_{165}N_5O_{42}$

M.W.: 2049.36

CAS No.: N/A

Package: mg , g



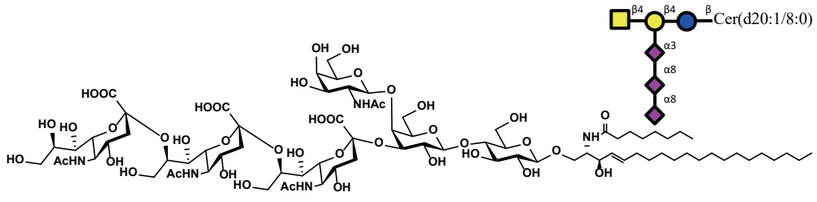
GL-2227 GT2Cer d20:1/8:0 (GalNAcb1,4(Neu5Aca2,8Neu5Aca2,8Neu5Aca2,3)Galb1,4GlcbCeramide)

M.F.: $C_{81}H_{139}N_5O_{42}$

M.W.: 1855.00

CAS No.: N/A

Package: mg , g



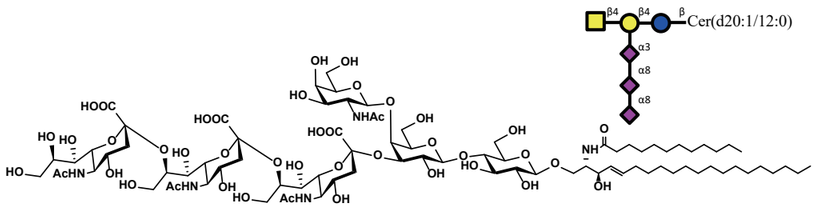
GL-2228 GT2Cer d20:1/12:0 (GalNAcb1,4(Neu5Aca2,8Neu5Aca2,8Neu5Aca2,3)Galb1,4GlcbCeramide)

M.F.: $C_{85}H_{147}N_5O_{42}$

M.W.: 1911.10

CAS No.: N/A

Package: mg , g



Ganglioside series (GT2)

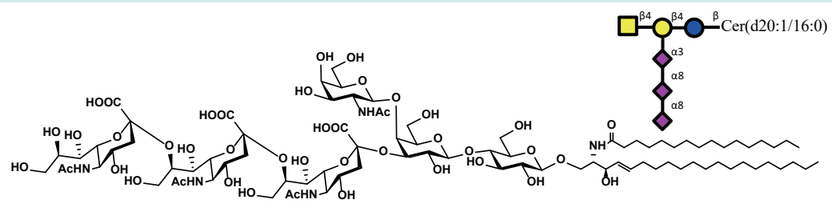
GL-2229 GT2Cer d20:1/16:0 (GalNAcb1,4(Neu5Aca2,8Neu5Aca2,8Neu5Aca2,3)Galb1,4GlcbCeramide)

M.F.: $C_{89}H_{155}N_5O_{42}$

M.W.: 1967.21

CAS No.: N/A

Package: mg , g



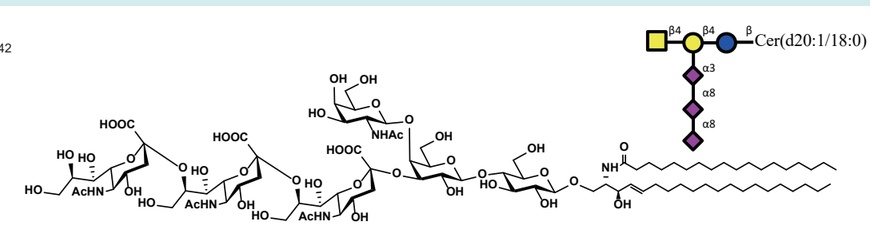
GL-2230 GT2Cer d20:1/18:0 (GalNAcb1,4(Neu5Aca2,8Neu5Aca2,8Neu5Aca2,3)Galb1,4GlcbCeramide)

M.F.: $C_{91}H_{159}N_5O_{42}$

M.W.: 1995.27

CAS No.: N/A

Package: mg , g



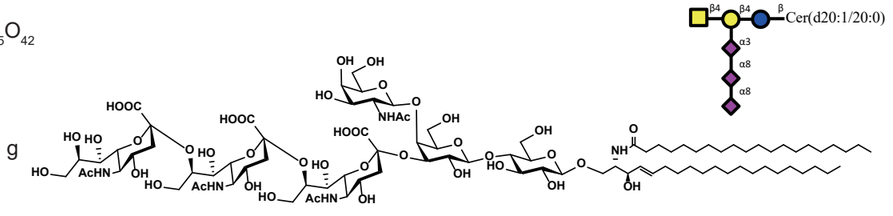
GL-2231 GT2Cer d20:1/20:0 (GalNAcb1,4(Neu5Aca2,8Neu5Aca2,8Neu5Aca2,3)Galb1,4GlcbCeramide)

M.F.: $C_{93}H_{163}N_5O_{42}$

M.W.: 2023.32

CAS No.: N/A

Package: mg , g



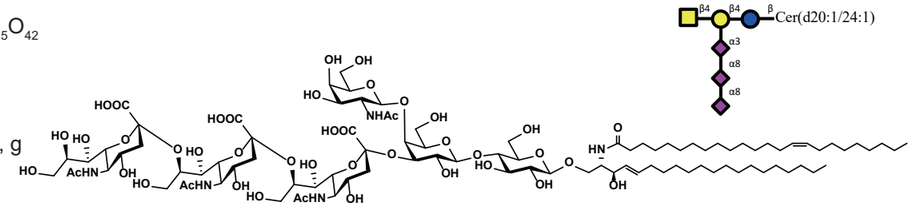
GL-2232 GT2Cer d20:1/24:1 (GalNAcb1,4(Neu5Aca2,8Neu5Aca2,8Neu5Aca2,3)Galb1,4GlcbCeramide)

M.F.: $C_{97}H_{169}N_5O_{42}$

M.W.: 2077.41

CAS No.: N/A

Package: mg , g



Ganglioside series (GT1c)

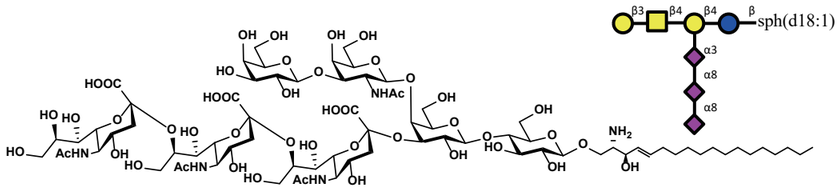
GL-0027 GT1csph d18:1 (Galb1,3GalNAcb1,4(Neu5Aca2,8Neu5Aca2,8Neu5Aca2,3)Galb1,4GlcbSphingosine)

M.F.: $C_{77}H_{131}N_5O_{46}$

M.W.: 1862.88

CAS No.: N/A

Package: mg , g



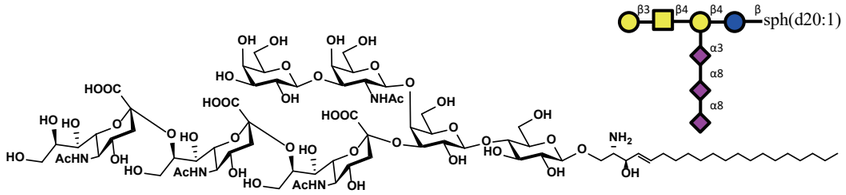
GL-0028 GT1csph d20:1 (Galb1,3GalNAcb1,4(Neu5Aca2,8Neu5Aca2,8Neu5Aca2,3)Galb1,4GlcbSphingosine)

M.F.: $C_{79}H_{135}N_5O_{46}$

M.W.: 1890.94

CAS No.: N/A

Package: mg , g



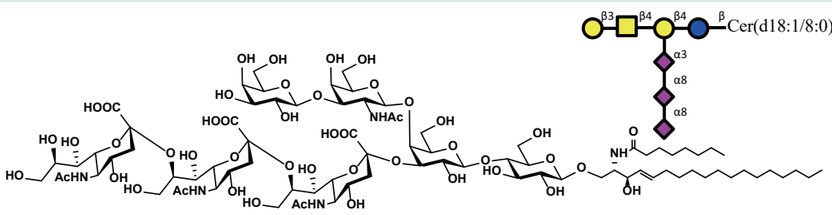
GL-2233 GT1cCer d18:1/8:0 (Galb1,3GalNAcb1,4(Neu5Aca2,8Neu5Aca2,8Neu5Aca2,3)Galb1,4GlcbCeramide)

M.F.: $C_{85}H_{145}N_5O_{47}$

M.W.: 1989.08

CAS No.: N/A

Package: mg , g



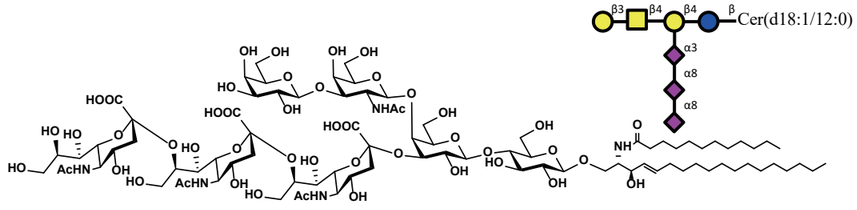
GL-2234 GT1cCer d18:1/12:0 (Galb1,3GalNAcb1,4(Neu5Aca2,8Neu5Aca2,8Neu5Aca2,3)Galb1,4GlcbCeramide)

M.F.: $C_{89}H_{153}N_5O_{47}$

M.W.: 2045.19

CAS No.: N/A

Package: mg , g



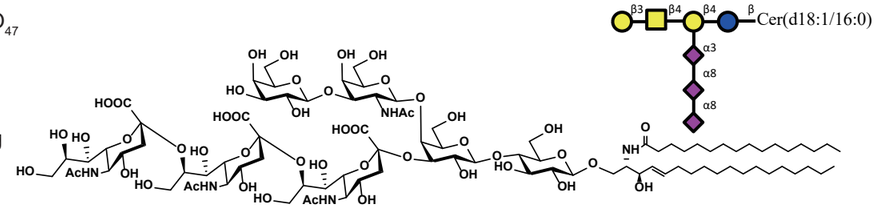
GL-2235 GT1cCer d18:1/16:0 (Galb1,3GalNAcb1,4(Neu5Aca2,8Neu5Aca2,8Neu5Aca2,3)Galb1,4GlcbCeramide)

M.F.: $C_{93}H_{165}N_5O_{47}$

M.W.: 2101.30

CAS No.: N/A

Package: mg , g



Ganglioside series (GT1c)

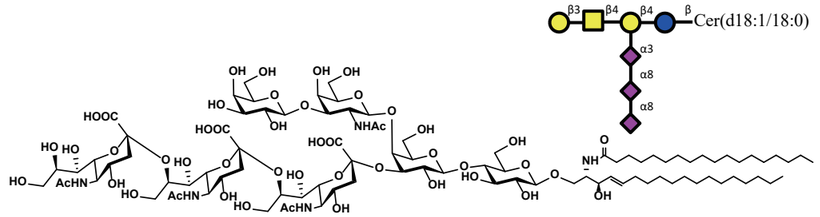
GL-2236 GT1cCer d18:1/18:0 (Galb1,3GalNAcb1,4(Neu5Aca2,8Neu5Aca2,8Neu5Aca2,3)Galb1,4GlcbCeramide)

M.F.: $C_{95}H_{165}N_5O_{47}$

M.W.: 2129.35

CAS No.: N/A

Package: mg , g



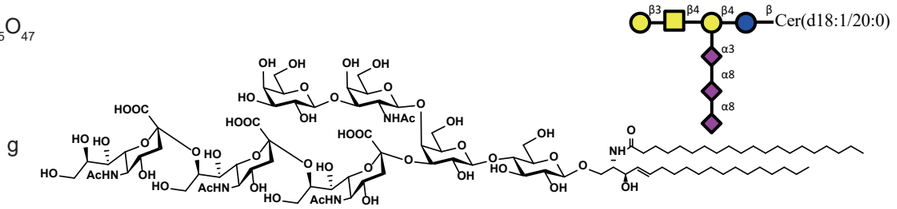
GL-2237 GT1cCer d18:1/20:0 (Galb1,3GalNAcb1,4(Neu5Aca2,8Neu5Aca2,8Neu5Aca2,3)Galb1,4GlcbCeramide)

M.F.: $C_{97}H_{169}N_5O_{47}$

M.W.: 2157.41

CAS No.: N/A

Package: mg , g



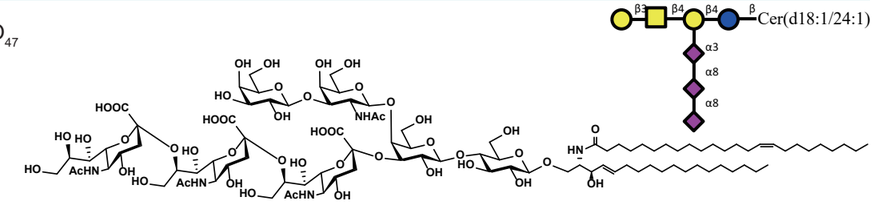
GL-2238 GT1cCer d18:1/24:1 (Galb1,3GalNAcb1,4(Neu5Aca2,8Neu5Aca2,8Neu5Aca2,3)Galb1,4GlcbCeramide)

M.F.: $C_{101}H_{175}N_5O_{47}$

M.W.: 2211.50

CAS No.: N/A

Package: mg , g



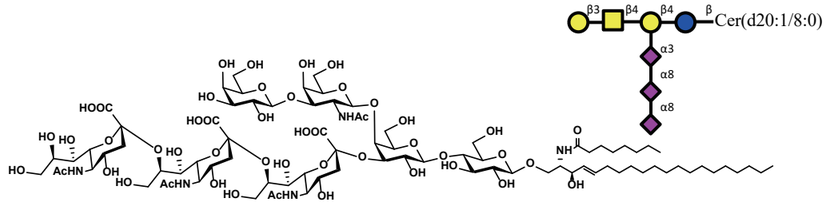
GL-2239 GT1cCer d20:1/8:0 (Galb1,3GalNAcb1,4(Neu5Aca2,8Neu5Aca2,8Neu5Aca2,3)Galb1,4GlcbCeramide)

M.F.: $C_{87}H_{149}N_5O_{47}$

M.W.: 2017.14

CAS No.: N/A

Package: mg , g



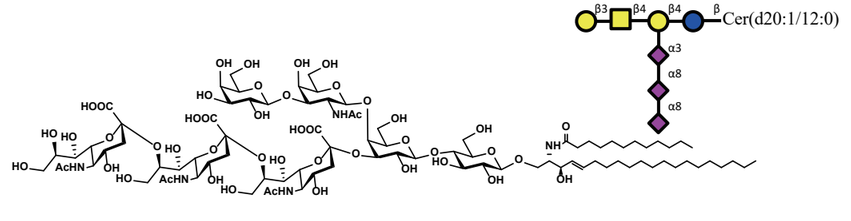
GL-2240 GT1cCer d20:1/12:0 (Galb1,3GalNAcb1,4(Neu5Aca2,8Neu5Aca2,8Neu5Aca2,3)Galb1,4GlcbCeramide)

M.F.: $C_{91}H_{157}N_5O_{47}$

M.W.: 2073.25

CAS No.: N/A

Package: mg , g



Ganglioside series (GT1c)

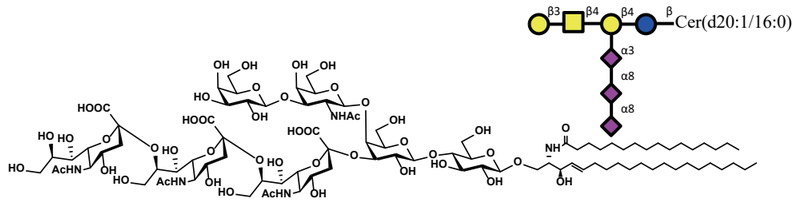
GL-2241 GT1cCer d20:1/16:0 (Galb1,3GalNAcb1,4(Neu5Aca2,8Neu5Aca2,8Neu5Aca2,3)Galb1,4GlcbCeramide)

M.F.: $C_{95}H_{165}N_5O_{47}$

M.W.: 2129.35

CAS No.: N/A

Package: mg , g



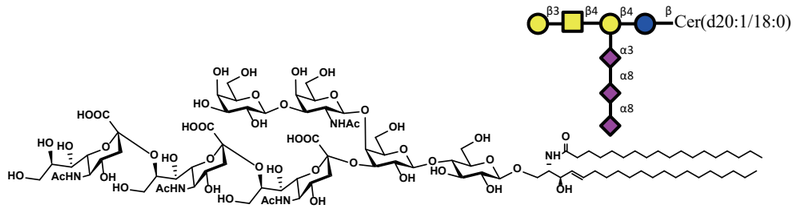
GL-2242 GT1cCer d20:1/18:0 (Galb1,3GalNAcb1,4(Neu5Aca2,8Neu5Aca2,8Neu5Aca2,3)Galb1,4GlcbCeramide)

M.F.: $C_{97}H_{169}N_5O_{47}$

M.W.: 2157.41

CAS No.: N/A

Package: mg , g



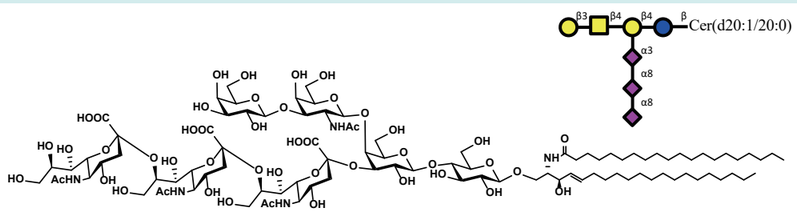
GL-2243 GT1cCer d20:1/20:0 (Galb1,3GalNAcb1,4(Neu5Aca2,8Neu5Aca2,8Neu5Aca2,3)Galb1,4GlcbCeramide)

M.F.: $C_{99}H_{173}N_5O_{47}$

M.W.: 2185.46

CAS No.: N/A

Package: mg , g



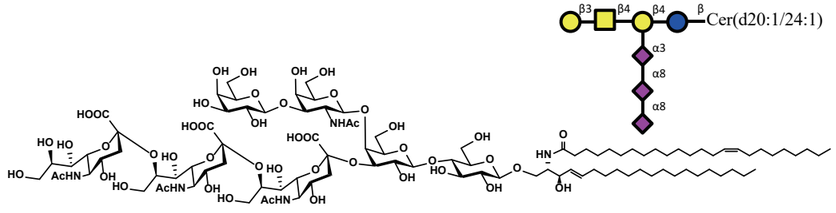
GL-2244 GT1cCer d20:1/24:1 (Galb1,3GalNAcb1,4(Neu5Aca2,8Neu5Aca2,8Neu5Aca2,3)Galb1,4GlcbCeramide)

M.F.: $C_{103}H_{179}N_5O_{47}$

M.W.: 2239.55

CAS No.: N/A

Package: mg , g



Ganglioside series (GQ3)

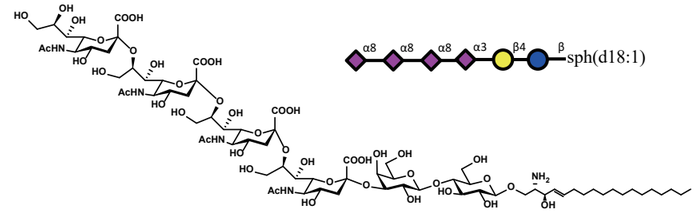
GL-0029 GQ3sph d18:1 (Neu5Aca2,8Neu5Aca2,8Neu5Aca2,8Neu5Aca2,3Galb1,4GlcbSphingosine)

M.F.: $C_{74}H_{125}N_5O_{44}$

M.W.: 1788.81

CAS No.: N/A

Package: mg , g



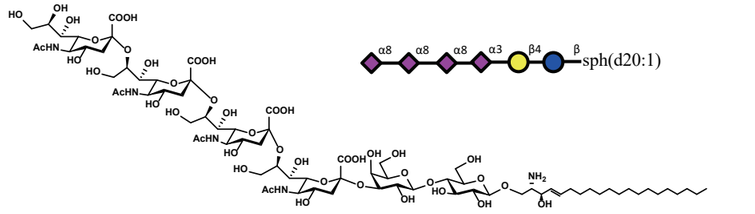
GL-0030 GQ3sph d20:1 (Neu5Aca2,8Neu5Aca2,8Neu5Aca2,8Neu5Aca2,3Galb1,4GlcbSphingosine)

M.F.: $C_{76}H_{129}N_5O_{44}$

M.W.: 1816.86

CAS No.: N/A

Package: mg , g



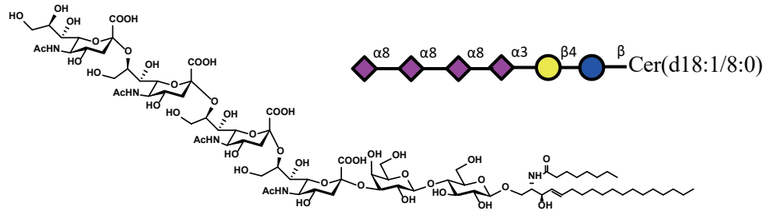
GL-2245 GQ3Cer d18:1/8:0 (Neu5Aca2,8Neu5Aca2,8Neu5Aca2,8Neu5Aca2,3Galb1,4GlcbCeramide)

M.F.: $C_{82}H_{139}N_5O_{45}$

M.W.: 1915.00

CAS No.: N/A

Package: mg , g



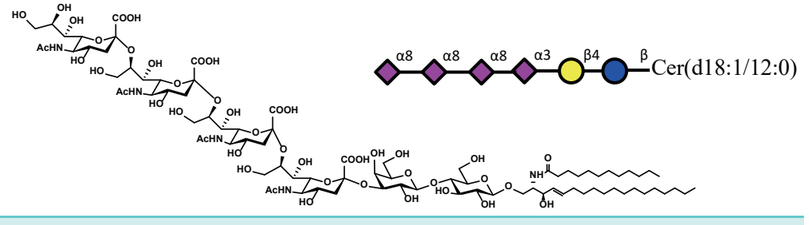
GL-2246 GQ3Cer d18:1/12:0 (Neu5Aca2,8Neu5Aca2,8Neu5Aca2,8Neu5Aca2,3Galb1,4GlcbCeramide)

M.F.: $C_{86}H_{147}N_5O_{45}$

M.W.: 1971.11

CAS No.: N/A

Package: mg , g



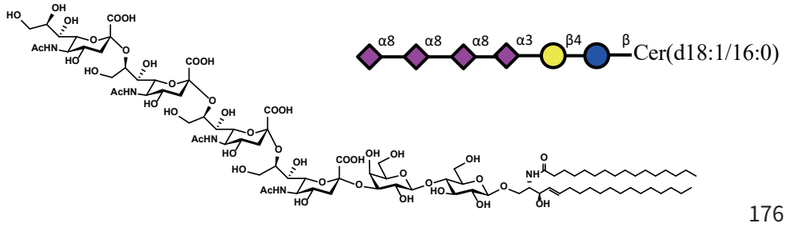
GL-2247 GQ3Cer d18:1/16:0 (Neu5Aca2,8Neu5Aca2,8Neu5Aca2,8Neu5Aca2,3Galb1,4GlcbCeramide)

M.F.: $C_{90}H_{155}N_5O_{45}$

M.W.: 2027.22

CAS No.: N/A

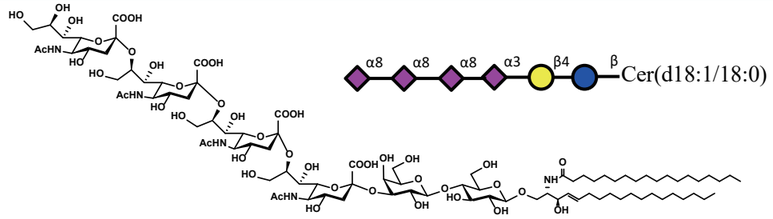
Package: mg , g



Ganglioside series (GQ3)

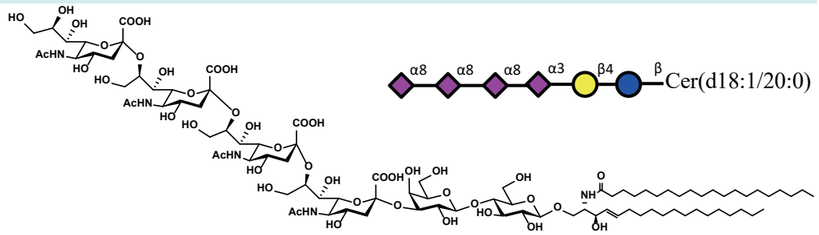
GL-2248 GQ3Cer d18:1/18:0 (Neu5Aca2,8Neu5Aca2,8Neu5Aca2,8Neu5Aca2,3Galb1,4GlcbCeramide)

M.F.: $C_{92}H_{159}N_5O_{45}$
M.W.: 2055.27
CAS No.: N/A
Package: mg , g



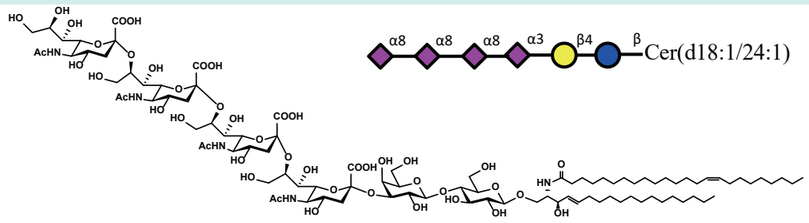
GL-2249 GQ3Cer d18:1/20:0 (Neu5Aca2,8Neu5Aca2,8Neu5Aca2,8Neu5Aca2,3Galb1,4GlcbCeramide)

M.F.: $C_{94}H_{163}N_5O_{45}$
M.W.: 2083.33
CAS No.: N/A
Package: mg , g



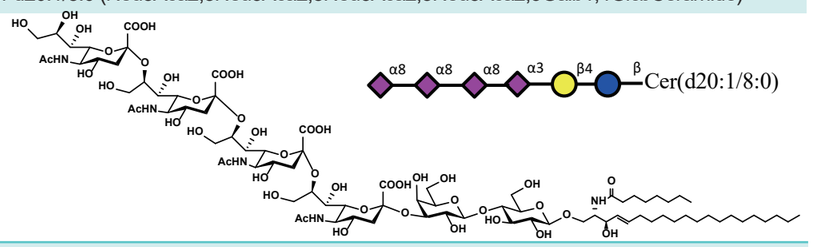
GL-2250 GQ3Cer d18:1/24:1 (Neu5Aca2,8Neu5Aca2,8Neu5Aca2,8Neu5Aca2,3Galb1,4GlcbCeramide)

M.F.: $C_{98}H_{169}N_5O_{45}$
M.W.: 2137.42
CAS No.: N/A
Package: mg , g



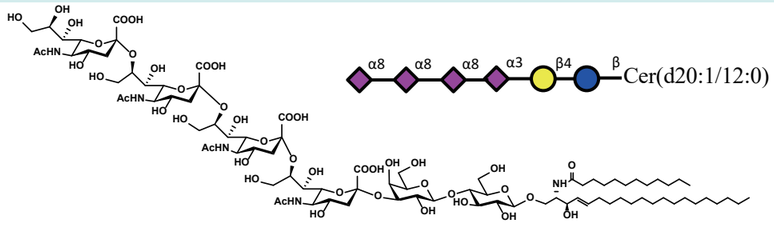
GL-2251 GQ3Cer d20:1/8:0 (Neu5Aca2,8Neu5Aca2,8Neu5Aca2,8Neu5Aca2,3Galb1,4GlcbCeramide)

M.F.: $C_{84}H_{143}N_5O_{45}$
M.W.: 1943.06
CAS No.: N/A
Package: mg , g



GL-2252 GQ3Cer d20:1/12:0 (Neu5Aca2,8Neu5Aca2,8Neu5Aca2,8Neu5Aca2,3Galb1,4GlcbCeramide)

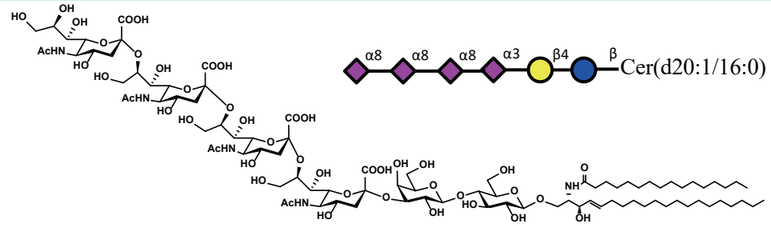
M.F.: $C_{88}H_{151}N_5O_{45}$
M.W.: 1999.17
CAS No.: N/A
Package: mg , g



Ganglioside series (GQ3)

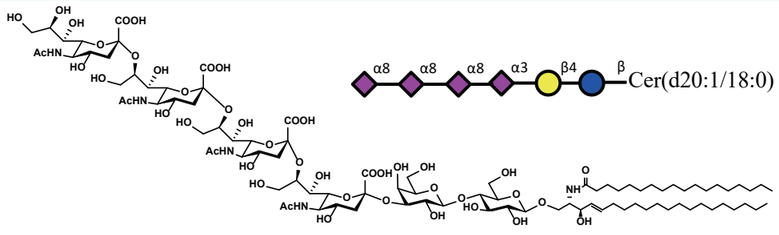
GL-2253 GQ3Cer d20:1/16:0 (Neu5Aca2,8Neu5Aca2,8Neu5Aca2,8Neu5Aca2,3Galb1,4GlcbCeramide)

M.F.: $C_{92}H_{159}N_5O_{45}$
M.W.: 2055.27
CAS No.: N/A
Package: mg , g



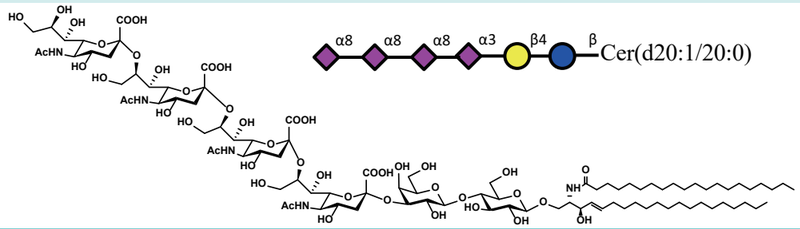
GL-2254 GQ3Cer d20:1/18:0 (Neu5Aca2,8Neu5Aca2,8Neu5Aca2,8Neu5Aca2,3Galb1,4GlcbCeramide)

M.F.: $C_{94}H_{163}N_5O_{45}$
M.W.: 2083.33
CAS No.: N/A
Package: mg , g



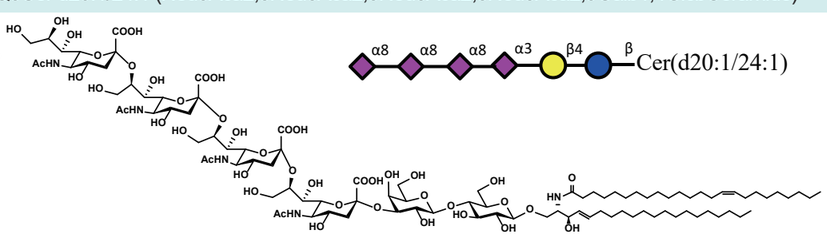
GL-2255 GQ3Cer d20:1/20:0 (Neu5Aca2,8Neu5Aca2,8Neu5Aca2,8Neu5Aca2,3Galb1,4GlcbCeramide)

M.F.: $C_{96}H_{167}N_5O_{45}$
M.W.: 2111.38
CAS No.: N/A
Package: mg , g



GL-2256 GQ3Cer d20:1/24:1 (Neu5Aca2,8Neu5Aca2,8Neu5Aca2,8Neu5Aca2,3Galb1,4GlcbCeramide)

M.F.: $C_{100}H_{173}N_5O_{45}$
M.W.: 2165.47
CAS No.: N/A
Package: mg , g



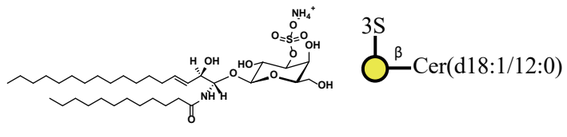
Sulfatide series

Sulfatide is abundant in the nervous system and participates in the formation of myelin. Myelin plays protective and insulating role on neurons, so defects in sulfatin metabolism can impair sensory, behavioral, cognitive and other functions, and are related to AD, PD, etc. Sulfatide is also found in the kidneys, gastrointestinal tract, and in the membranes of red blood cells, platelets, and granulocytes, and may be involved in tumors, diabetes, and some immune diseases (e.g, multiple sclerosis)[*].

Reference:
[*]Jarosław Suchański, et al. 2016 May 9;70:489-504.

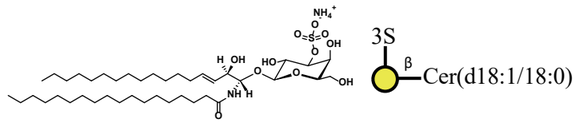
GSLA-0001 Mono-sulfo-GalactosylbCeramide(d18:1/12:0)

M.F.: $C_{35}H_{70}N_2O_{11}S$
M.W.: 727.01
CAS No.: 852043-39-1
Package: mg , g



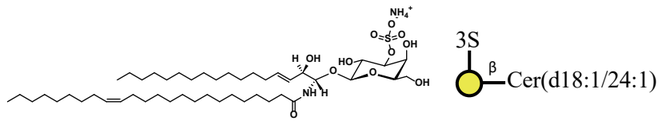
GSLA-0002 Mono-sulfo-GalactosylbCeramide(d18:1/18:0)

M.F.: $C_{41}H_{82}N_2O_{11}S$
M.W.: 811.17
CAS No.: 2260670-26-4/2260270-28-6
Package: mg , g



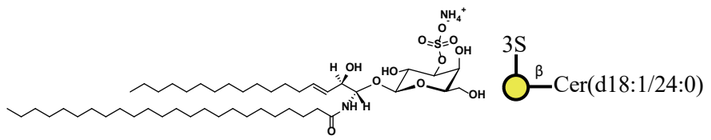
GSLA-0003 Mono-sulfo-GalactosylbCeramide(d18:1/24:1)

M.F.: $C_{47}H_{92}N_2O_{11}S$
M.W.: 893.32
CAS No.: 1246355-69-0
Package: mg , g



GSLA-0004 Mono-sulfo-GalactosylbCeramide(d18:1/24:0)

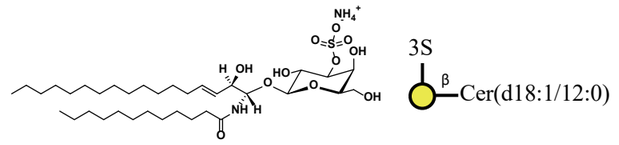
M.F.: $C_{47}H_{94}N_2O_{11}S$
M.W.: 895.33
CAS No.: 1246304-32-4
Package: mg , g



Sulfatide series

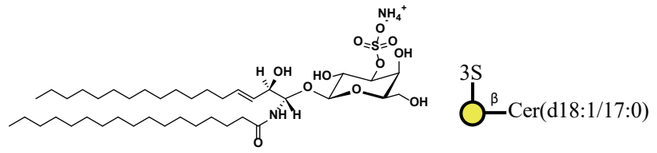
GSLA-0005 Di-sulfo-GalactosylbCeramide(d18:1/12:0)

M.F.: $C_{35}H_{70}N_2O_{11}S$
M.W.: 727.01
CAS No.: 852043-40-4
Package: mg , g



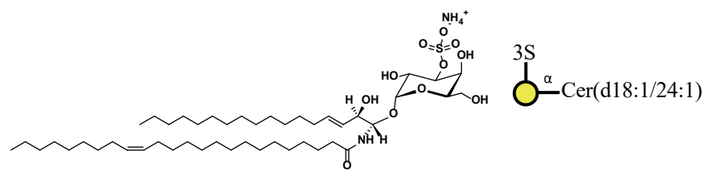
GSLA-0006 Mono-sulfo-GalactosylbCeramide(d18:1/17:0)

M.F.: $C_{40}H_{80}N_2O_{11}S$
M.W.: 797.14
CAS No.: 1246303-23-0
Package: mg , g



GSLA-0007 Mono-sulfo-GalactosylaCeramide(d18:1/24:1)

M.F.: $C_{47}H_{92}N_2O_{11}S$
M.W.: 893.32
CAS No.: 2260670-38-8
Package: mg , g



Biotin modification series

Biotin-modified glycosphingolipids are beneficial to detect the binding of glycosphingolipids to toxins, pathogens, cells, etc., and even track their intracellular metabolism. For example, after GM1-Biotin is taken up by rat neuroblastoma cell B104 and human neuroblastoma cell SHSY5Y, their endocytosis and distribution in the lysosomal membrane can be studied by immunoelectron microscopy, and they can be found in the cell lysosome. It is metabolized into GM2-Biotin and GM3-Biotin[*].

Reference:

[*] Bernd Albrecht, et al. Chemistry and Physics of Lipids,Volume 86, Issue 1,1997,Pages 37-50.

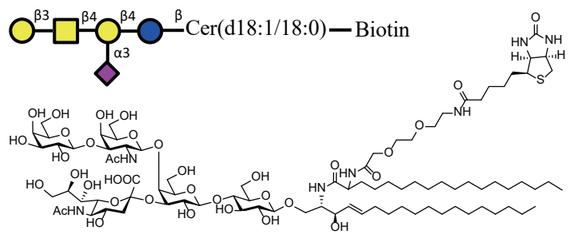
GSLA-1001 GM1aCer d18:1/18:0-Biotin (Galb1,3GalNAcb1,4(Neu5Aca2,3)Galb1,4GlcbCeramide-Biotin)

M.F.: $C_{89}H_{157}N_7O_{36}S$

M.W.: 1933.31

CAS No.: 2770684-25-6

Package: mg , g



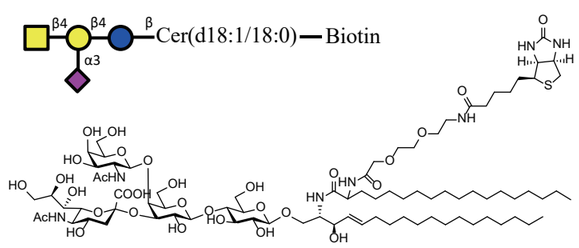
GSLA-1002 GM2Cer d18:1/18:0-Biotin (GalNAcb1,4(Neu5Aca2,3)Galb1,4GlcbCeramide-Biotin)

M.F.: $C_{83}H_{147}N_7O_{31}S$

M.W.: 1771.17

CAS No.: N/A

Package: mg , g



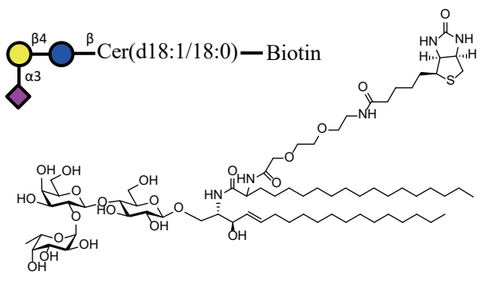
GSLA-1003 GM3Cer d18:1/18:0-Biotin ((Neu5Aca2,3)Galb1,4GlcbCeramide-Biotin)

M.F.: $C_{70}H_{127}N_5O_{22}S$

M.W.: 1422.86

CAS No.: N/A

Package: mg , g



Biotin modification series

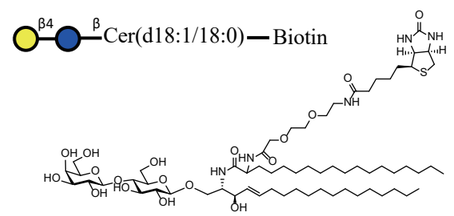
GSLA-1004 LacCer d18:1/18:0-Biotin (Galb1,4GlcbCeramide-Biotin)

M.F.: $C_{64}H_{117}N_5O_{18}S$

M.W.: 1276.72

CAS No.: N/A

Package: mg , g



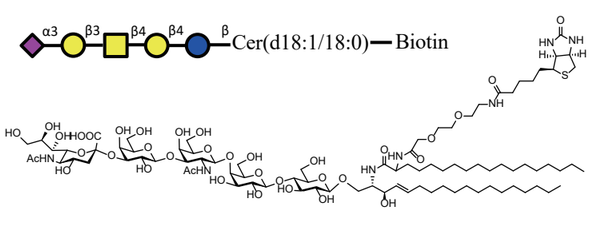
GSLA-1005 GM1bCer d18:1/18:0-Biotin ((Neu5Aca2,3)Galb1,3GalNAcb1,4Galb1,4GlcbCeramide-Biotin)

M.F.: $C_{89}H_{157}N_7O_{36}S$

M.W.: 1933.31

CAS No.: N/A

Package: mg , g



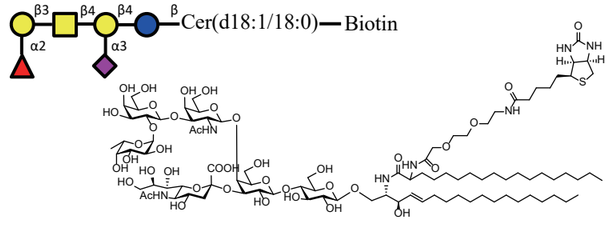
GSLA-1006 FucGM1Cer d18:1/18:0-Biotin ((Fuca1,2)Galb1,3GalNAcb1,4(Neu5Aca2,3)Galb1,4GlcbCeramide-Biotin)

M.F.: $C_{95}H_{167}N_7O_{40}S$

M.W.: 2079.45

CAS No.: N/A

Package: mg , g



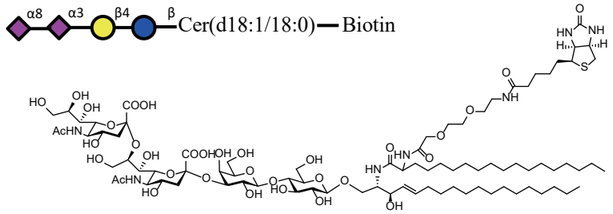
GSLA-1007 GD3Cer d18:1/18:0-Biotin (Neu5Aca2,8Neu5Aca2,3Galb1,4GlcbCeramide-Biotin)

M.F.: $C_{86}H_{151}N_7O_{34}S$

M.W.: 1859.23

CAS No.: N/A

Package: mg , g



Biotin modification series

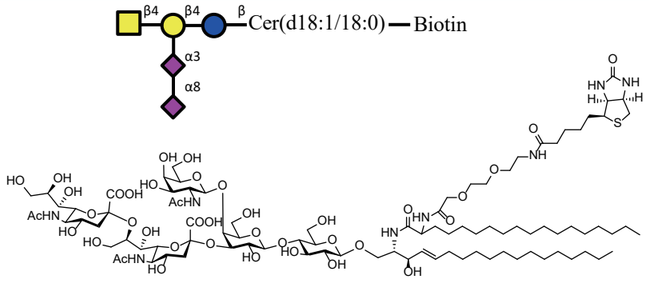
GSLA-1008 GD2Cer d18:1/18:0-Biotin (GalNAcb1,4(Neu5Aca2,8Neu5Aca2,3)Galb1,4GlcbCeramide-Biotin)

M.F.: $C_{94}H_{164}N_8O_{39}S$

M.W.: 2062.42

CAS No.: N/A

Package: mg , g



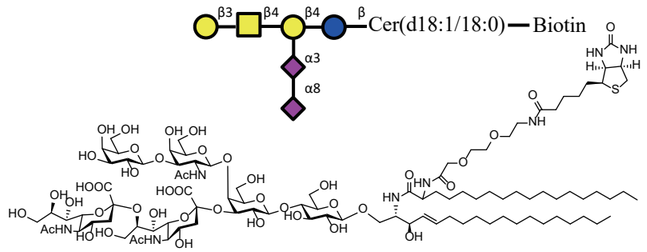
GSLA-1009 GD1bCer d18:1/18:0-Biotin (Galb1,3GalNAcb1,4(Neu5Aca2,8Neu5Aca2,3)Galb1,4GlcbCeramide-Biotin)

M.F.: $C_{100}H_{174}N_8O_{44}S$

M.W.: 2224.56

CAS No.: N/A

Package: mg , g



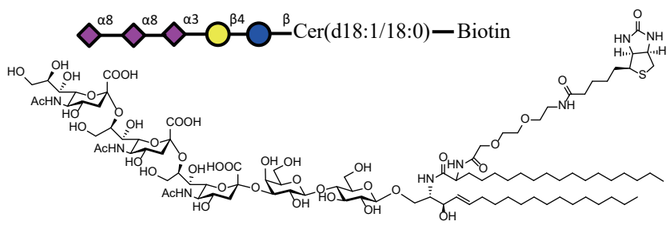
GSLA-1010 GT3Cer d18:1/18:0-Biotin (Neu5Aca2,8Neu5Aca2,8Neu5Aca2,3Galb1,4GlcbCeramide-Biotin)

M.F.: $C_{97}H_{168}N_8O_{42}S$

M.W.: 2150.49

CAS No.: N/A

Package: mg , g



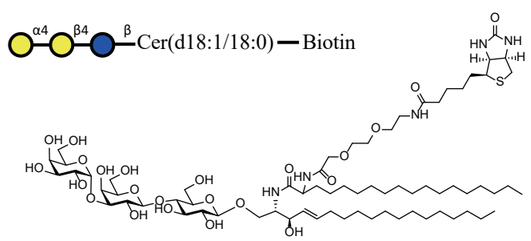
GSLA-1011 GB3Cer d18:1/18:0-Biotin (Gala1,4Galb1,4GlcbCeramide-Biotin)

M.F.: $C_{70}H_{127}N_5O_{23}S$

M.W.: 1438.86

CAS No.: N/A

Package: mg , g



Biotin modification series

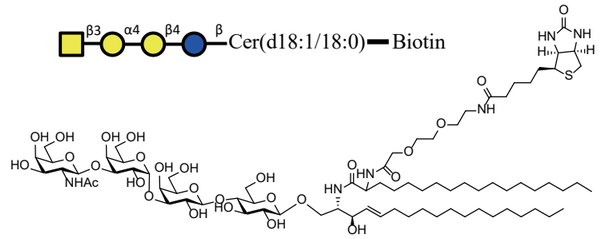
GSLA-1012 GB4Cer d18:1/18:0-Biotin (GalNAcb1,3Gala1,4Galb1,4GlcbCeramide-Biotin)

M.F.: $C_{78}H_{140}N_6O_{28}S$

M.W.: 1642.05

CAS No.: N/A

Package: mg , g



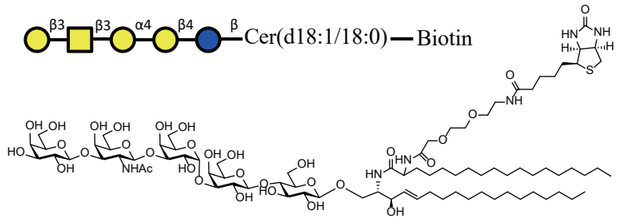
GSLA-1013 GB5Cer d18:1/18:0-Biotin (Galb1,3GalNAcb1,3Gala1,4Galb1,4GlcbCeramide-Biotin)

M.F.: $C_{84}H_{150}N_6O_{33}S$

M.W.: 1804.19

CAS No.: N/A

Package: mg , g



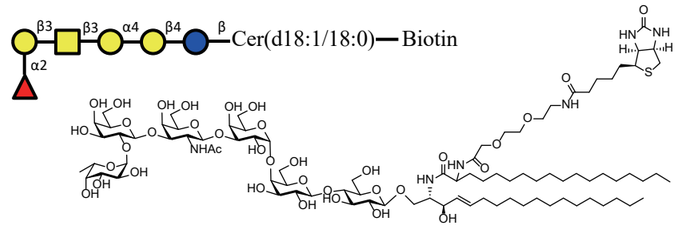
GSLA-1014 GloboHCer d18:1/18:0-Biotin ((Fuca1,2)Galb1,3GalNAcb1,3Gala1,4Galb1,4GlcbCeramide-Biotin)

M.F.: $C_{90}H_{160}N_6O_{37}S$

M.W.: 1950.34

CAS No.: N/A

Package: mg , g



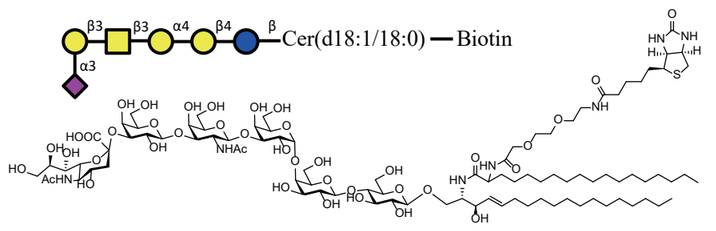
GSLA-1015 SSEA-4 d18:1/18:0-Biotin ((Neu5Aca2,3)Galb1,3GalNAcb1,3Gala1,4Galb1,4GlcbCeramide-Biotin)

M.F.: $C_{95}H_{167}N_7O_{41}S$

M.W.: 2095.45

CAS No.: N/A

Package: mg , g



Biotin modification series

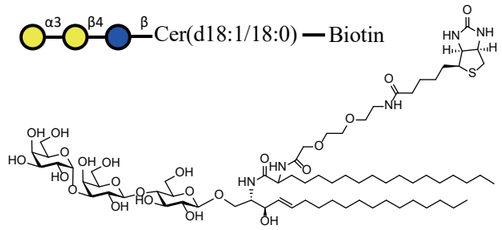
GSLA-1016 iGB3Cer d18:1/18:0-Biotin (Gala1,3Galb1,4GlcbCeramide-Biotin)

M.F.: $C_{70}H_{127}N_5O_{23}S$

M.W.: 1438.86

CAS No.: N/A

Package: mg , g



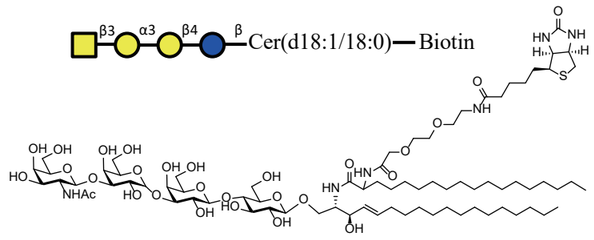
GSLA-1017 iGB4Cer d18:1/18:0-Biotin (GalNAcb1,3Gala1,3Galb1,4GlcbCeramide-Biotin)

M.F.: $C_{78}H_{140}N_6O_{28}S$

M.W.: 1642.05

CAS No.: N/A

Package: mg , g



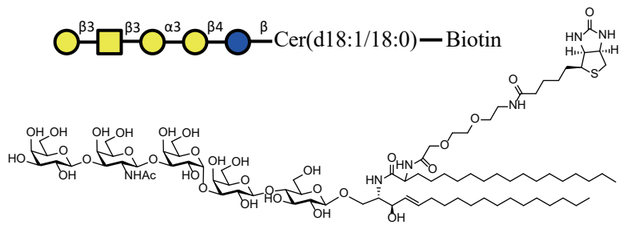
GSLA-1018 iGB5Cer d18:1/18:0-Biotin (Galb1,3GalNAcb1,3Gala1,3Galb1,4GlcbCeramide-Biotin)

M.F.: $C_{84}H_{150}N_6O_{33}S$

M.W.: 1804.19

CAS No.: N/A

Package: mg , g



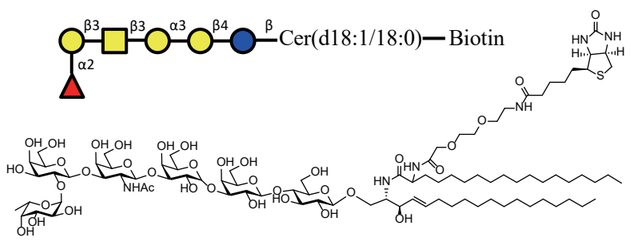
GSLA-1019 iGloboHCer d18:1/18:0-Biotin ((Fuca1,2)Galb1,3GalNAcb1,3Gala1,3Galb1,4GlcbCeramide-Biotin)

M.F.: $C_{90}H_{160}N_6O_{37}S$

M.W.: 1950.34

CAS No.: N/A

Package: mg , g



Biotin modification series

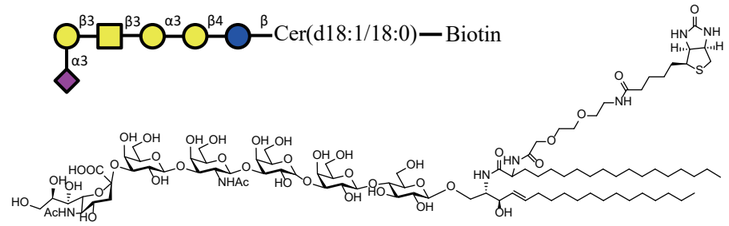
GSLA-1020 SialylGB5Cer d18:1/18:0-Biotin ((Neu5Aca2,3)Galb1,3GalNAcb1,3Gala1,3Galb1,4GlcbCeramide-Biotin)

M.F.: $C_{95}H_{167}N_7O_{41}S$

M.W.: 2095.45

CAS No.: N/A

Package: mg , g



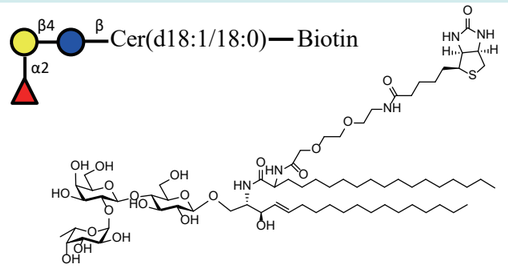
GSLA-1021 H-Antigen-Cer d18:1/18:0-Biotin ((Fuca1,2)Galb1,4GlcbCeramide-Biotin)

M.F.: $C_{70}H_{127}N_5O_{22}S$

M.W.: 1422.86

CAS No.: N/A

Package: mg , g



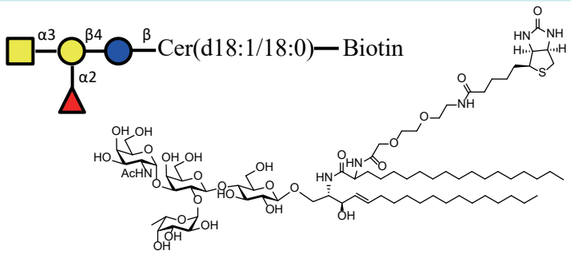
GSLA-1022 A-Antigen-Cer d18:1/18:0-Biotin (GalNAca1,3(Fuca1,2)Galb1,4GlcbCeramide-Biotin)

M.F.: $C_{78}H_{140}N_6O_{27}S$

M.W.: 1626.05

CAS No.: N/A

Package: mg , g



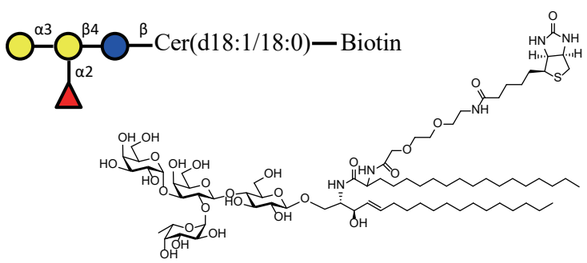
GSLA-1023 B-Antigen-Cer d18:1/18:0-Biotin (Gala1,3(Fuca1,2)Galb1,4GlcbCeramide-Biotin)

M.F.: $C_{76}H_{137}N_5O_{27}S$

M.W.: 1585.00

CAS No.: N/A

Package: mg , g



Biotin modification series

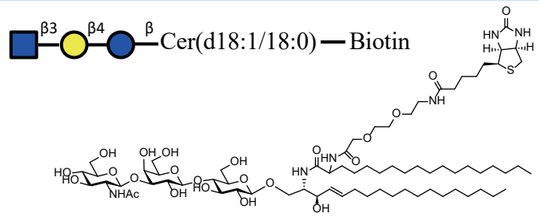
GSLA-1024 Lc3Cer d18:1/18:0-Biotin (GlcNAcb1,3Galb1,4GlcbCeramide-Biotin)

M.F.: $C_{72}H_{130}N_6O_{23}S$

M.W.: 1479.91

CAS No.: N/A

Package: mg , g



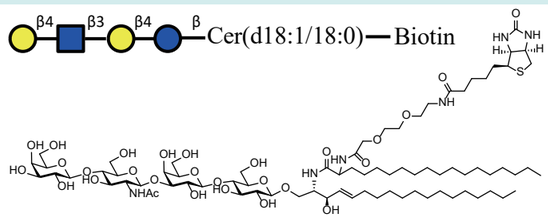
GSLA-1025 nLc4Cer d18:1/18:0-Biotin (Galb1,4GlcNAcb1,3Galb1,4GlcbCeramide-Biotin)

M.F.: $C_{78}H_{140}N_6O_{28}S$

M.W.: 1642.05

CAS No.: N/A

Package: mg , g



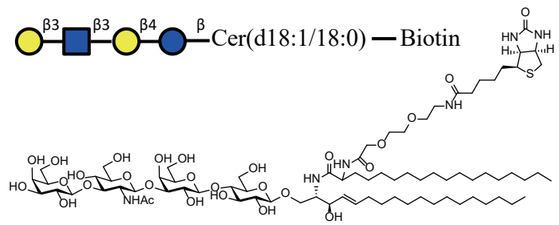
GSLA-1026 Lc4Cer d18:1/18:0-Biotin (Galb1,3GlcNAcb1,3Galb1,4GlcbCeramide-Biotin)

M.F.: $C_{78}H_{140}N_6O_{28}S$

M.W.: 1642.05

CAS No.: N/A

Package: mg , g



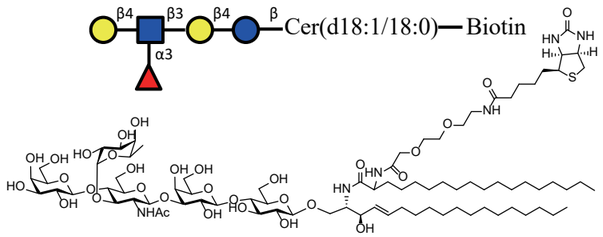
GSLA-1027 LewisxCer d18:1/18:0-Biotin (Galb1,4(Fuca1,3)GlcNAcb1,3Galb1,4GlcbCeramide-Biotin)

M.F.: $C_{84}H_{150}N_6O_{32}S$

M.W.: 1788.19

CAS No.: N/A

Package: mg , g



Biotin modification series

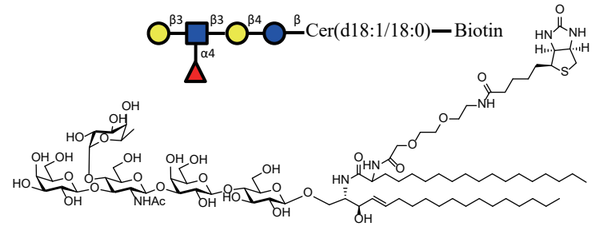
GSLA-1028 LewisaCer d20:1/24:1-Biotin (Galb1,3(Fuca1,4)GlcNAcb1,3Galb1,4GlcbCeramide-Biotin)

M.F.: $C_{84}H_{150}N_6O_{32}S$

M.W.: 1788.19

CAS No.: N/A

Package: mg , g

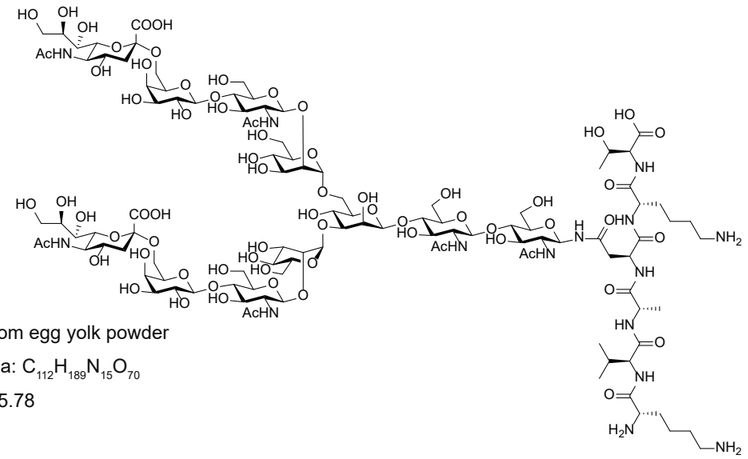


GLYCOGENE

SGP and derivatives

Introduction to SGP and applications

Sialoglycopeptide (SGP) is a biantennary sialylated glycopeptide extracted from egg yolk. From extraction, purification, analysis and storage, Glycogene LLC has overcome the difficulties in the production and purification of SGP from gram scale to hundred gram scale, which accelerate its application from scientific research laboratories to industry. With SGP as the starting material, not only a variety of N-glycans can be obtained through the action of enzymes, but also glycoconjugates containing glycopeptides and glycoproteins are available to manufacture.



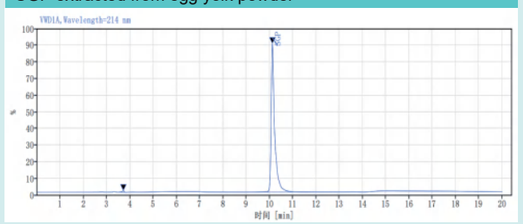
SGP extracted from egg yolk powder

Chemical Formula: $C_{112}H_{189}N_{15}O_{70}$

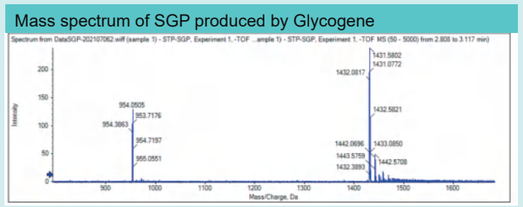
Exact Mass: 2865.78

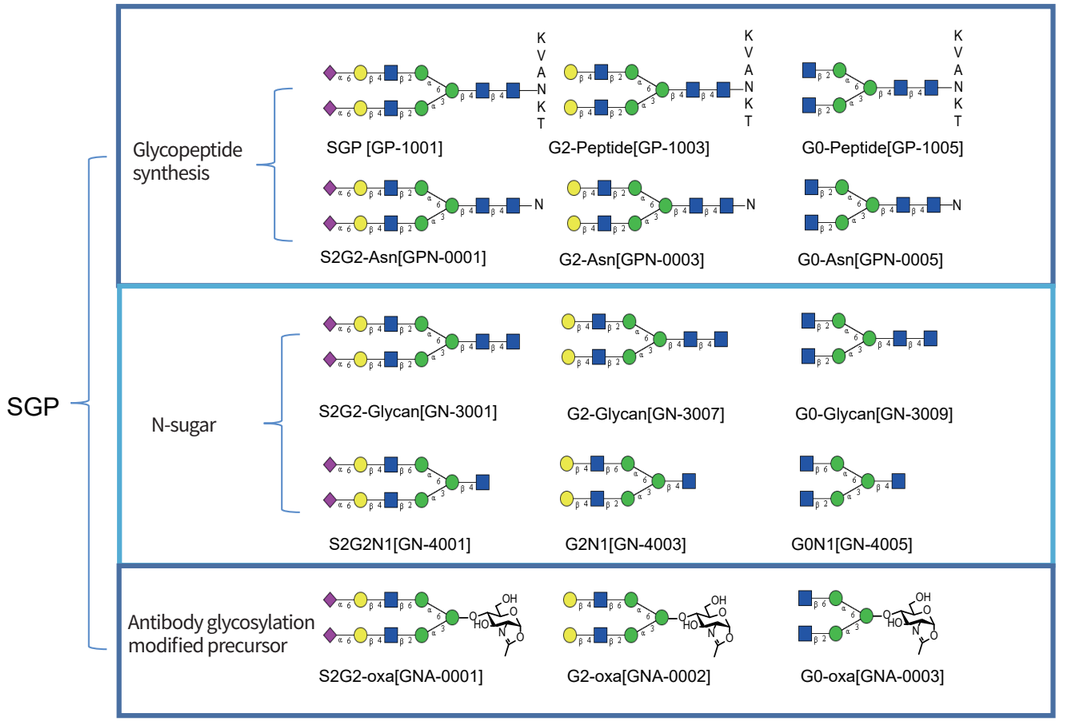
GP-1001

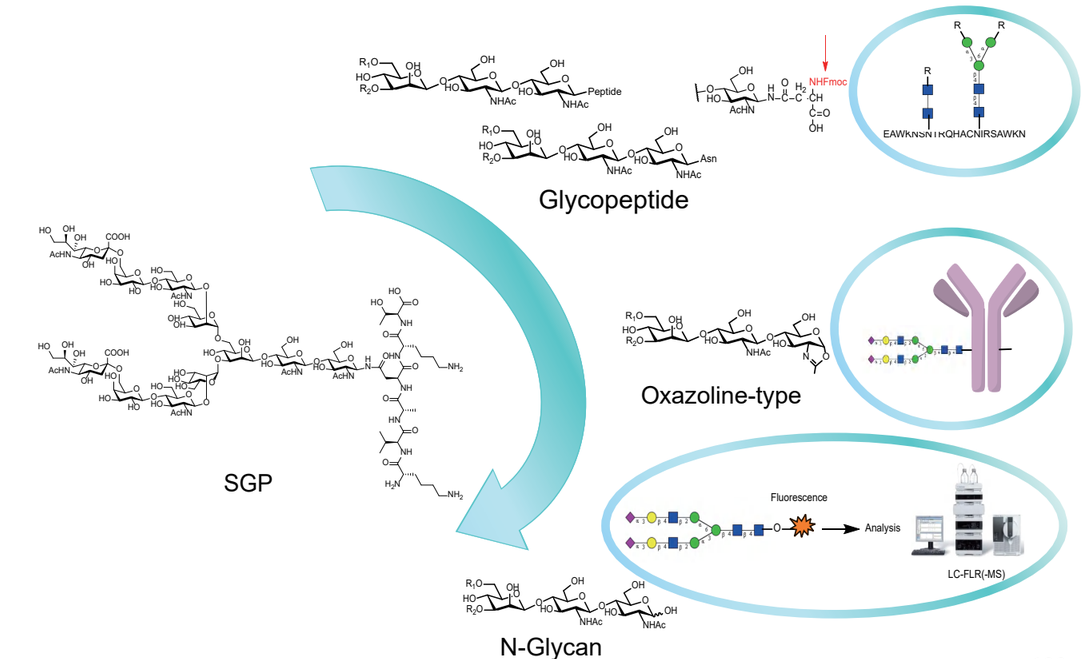
SGP extracted from egg yolk powder



Mass spectrum of SGP produced by Glycogene



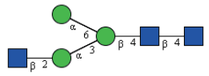




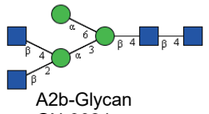
GLYCOGENE

N-Glycan

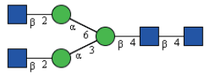
M3-Glycan
GN-3022



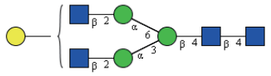
A1b-Glycan
GN-3023



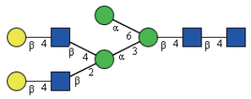
A2b-Glycan
GN-3024



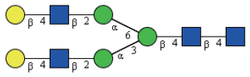
G0-Glycan
GN-3009



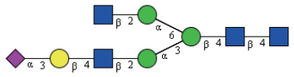
G1-Glycan
GN-3008



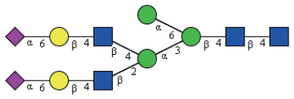
G2A2b-Glycan
GN-3025



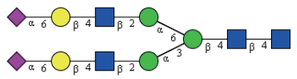
G2-Glycan
GN-3007



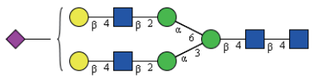
S1G1bA2-Glycan
GN-3027



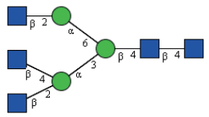
S2(6)G2A2b-Glycan
GN-3026



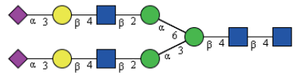
S2(6)G2-Glycan
GN-3001



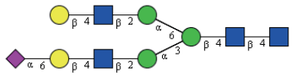
S1G2-Glycan
GN-3003



A1aA2b-Glycan
GN-3030

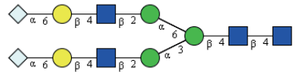


S2(3)G2-Glycan
GN-3002

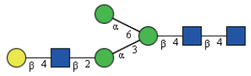


S1bG2-Glycan
GN-3006

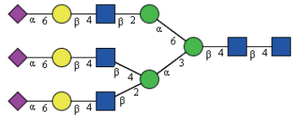
G1A1aG2A2b-Glycan
GN-3031



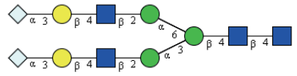
Neu5Gc2(6)G2-Glycan
GN-3005



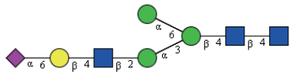
G1A1b-Glycan
GN-3028



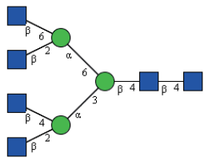
S1(6)G1A1aS2(6)G2A2b-Glycan
GN-3032



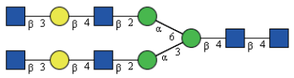
Neu5Gc2(3)G2-Glycan
GN-3004



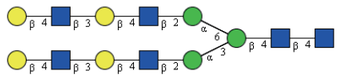
S1G1A1b-Glycan
GN-3029



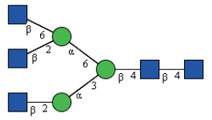
A4-Glycan
GN-3034



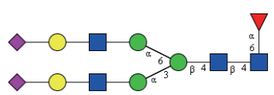
A2G2A2G3-Glycan
GN-3035



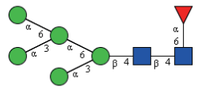
G2A2G2A2G3-Glycan
GN-3036



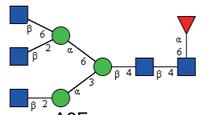
A2aA1b-Glycan
GN-3010



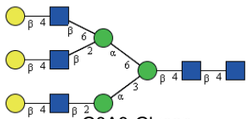
S2G2F
GN-3017



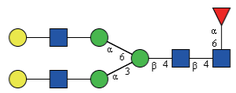
M5F
GN-3021



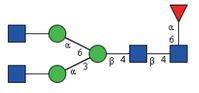
A3F
GN-3020



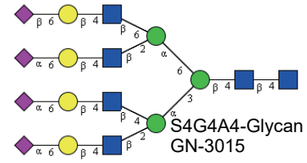
G3A3-Glycan
GN-3011



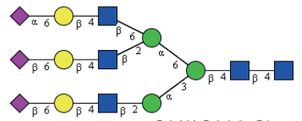
G2F
GN-3019



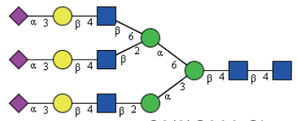
G0F
GN-3018



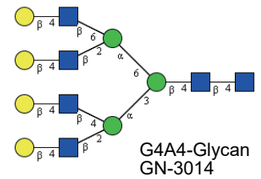
S4G4A4-Glycan
GN-3015



S3(6)G3A3-Glycan
GN-3012

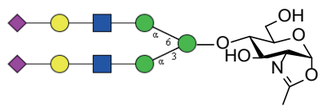


S3(3)G3A3-Glycan
GN-3033

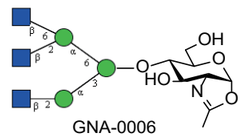


G4A4-Glycan
GN-3014

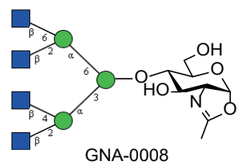
Oxazoline



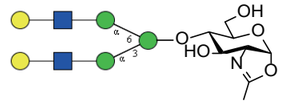
GNA-0001



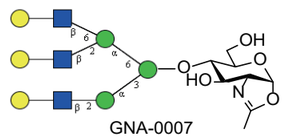
GNA-0006



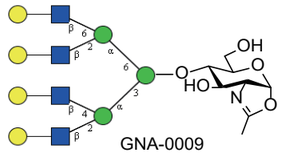
GNA-0008



GNA-0002



GNA-0007



GNA-0009

GNA-0003

GNA-0004

GNA-0005

GNA-0010

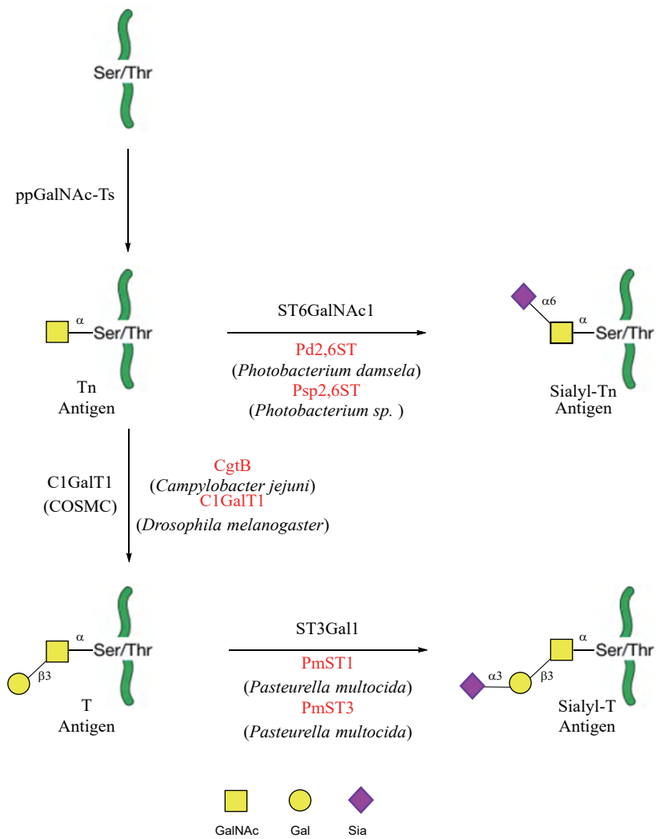
Glycopeptides

Glycopeptides are a class of macromolecular compounds in which oligosaccharides and polypeptides are linked together. There are two main types of linkages, i.e., N-glycopeptide and O-glycopeptide.

Glycopeptides have important applications in the research and development of carbohydrate drugs, such as glycopeptide antibiotics and antitumor vaccines. After decades of development, peptide synthesis technology has become very mature, and the synthesis of oligosaccharides has also made significant progress in recent years. However, the synthesis of glycopeptides is still very challenging.

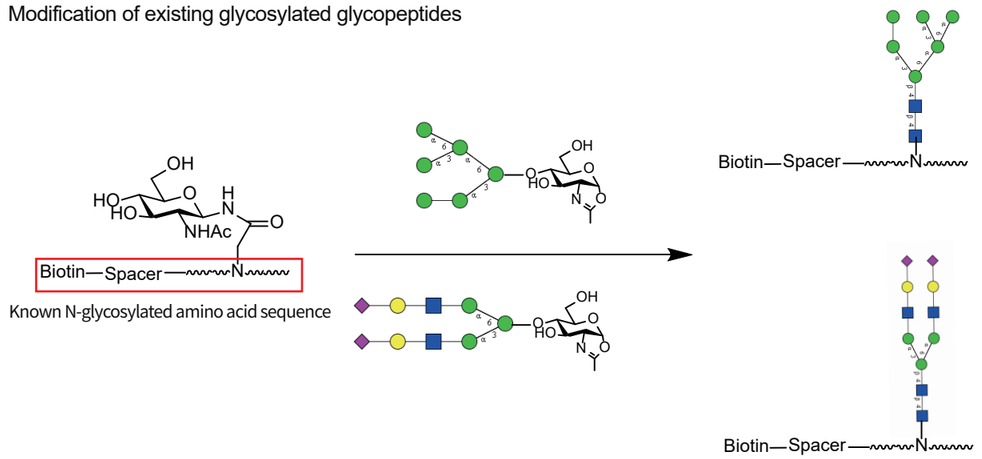
N-linked glycopeptide is the side chain amine of asparagine linked to the sugar group through a β-N-glycosidic bond. O-linked glycopeptide is sugar and serine or threonine in peptide chain connected by O-glycosidic bonds. The O- or N-glycosidic bond in the glycopeptide is also an acetal structure, so it has the acid chemical sensitivity of acetal, and will be cut off or undergo terminal isomerization when encountering an acid. In addition, the O-glycosidic bond is also sensitive to the base. Moreover, medium-strength alkali can cause the β-elimination reaction of sugar and the decomposition of glycopeptide. Strong nucleophiles will also cleave or isomerize glycosidic bonds. Therefore, when carry out glycopeptide synthesis, it is necessary to choose mild protection and deprotection conditions, mild condensation and methods for sugar chain and peptide chain extension.

Synthesis of O-Glycopeptides

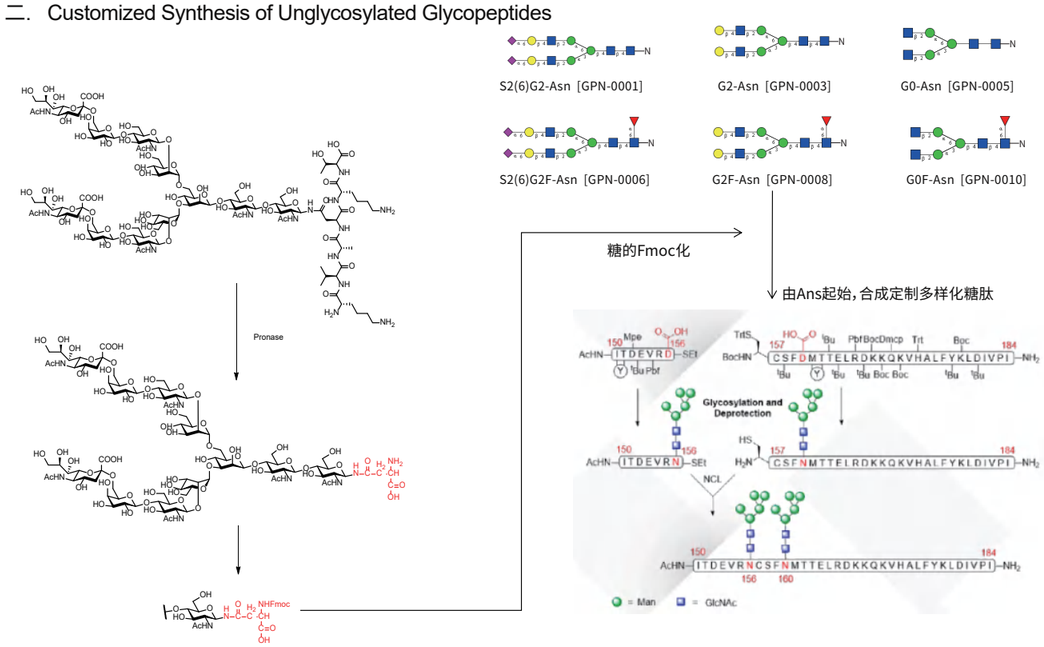


Synthesis of N-Glycopeptides

—. Modification of existing glycosylated glycopeptides



二. Customized Synthesis of Unglycosylated Glycopeptides



O-Glycopeptides

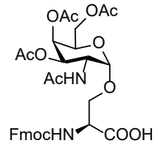
GPO-0001 Fmoc-Ser(Ac_3GalNAca)-OH

M.F.: $C_{32}H_{36}N_2O_{13}$

M.W.: 656.64

CAS No.: 120173-57-1

Package: mg to kg



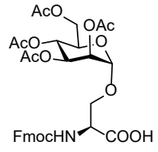
GPO-0002 Fmoc-Ser(Ac_4Mana)-OH

M.F.: $C_{32}H_{35}NO_{14}$

M.W.: 657.63

CAS No.: 118358-80-8

Package: mg to kg



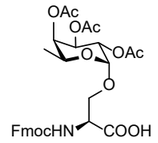
GPO-0003 Fmoc-L-Ser(Ac_3-L-Fuca)-OH

M.F.: $C_{30}H_{33}NO_{12}$

M.W.: 599.59

CAS No.: 173935-46-1

Package: mg to kg



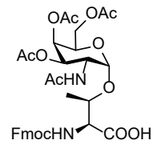
GPO-0004 Fmoc-Thr(Ac_3GalNAca)-OH

M.F.: $C_{33}H_{38}N_2O_{13}$

M.W.: 670.67

CAS No.: 116783-35-8

Package: mg to kg



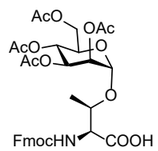
GPO-0005 Fmoc-Thr(Ac_4Mana)-OH

M.F.: $C_{33}H_{37}NO_{24}$

M.W.: 671.65

CAS No.: 169219-08-3

Package: mg to kg



O-Glycopeptides

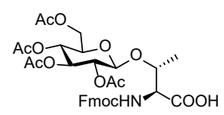
GPO-0006 Fmoc-L-Thr(Ac_4-D-Glcβ-OH)

M.F.: $C_{33}H_{37}NO_{14}$

M.W.: 671.65

CAS No.: 130548-92-4

Package: mg to kg



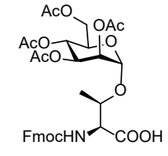
GPO-0007 Fmoc-Thr(Ac_4Mana)-OH

M.F.: $C_{33}H_{37}NO_{14}$

M.W.: 671.65

CAS No.: 169219-08-3

Package: mg to kg



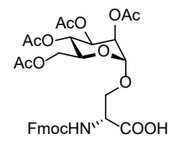
GPO-0008 Fmoc-D-Ser(Ac_4-L-Mana)-OH

M.F.: $C_{32}H_{35}NO_{14}$

M.W.: 657.63

CAS No.: N/A

Package: mg to kg



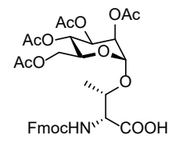
GPO-0009 Fmoc-D-Thr(Ac_4-L-Mana)-OH

M.F.: $C_{33}H_{37}NO_{14}$

M.W.: 671.65

CAS No.: N/A

Package: mg to kg



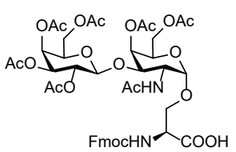
GPO-0010 Fmoc-Ser(Ac_4Galβ-3Ac_2GalNAca)-OH

M.F.: $C_{44}H_{52}N_2O_{21}$

M.W.: 944.89

CAS No.: 125760-30-7

Package: mg to kg



O-Glycopeptides

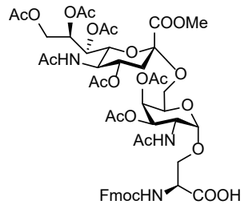
GPO-0011 Fmoc-Ser(Me,Ac_4Neu5Aca2-6Ac_2GalNAca)-OH

M.F.: $C_{50}H_{61}N_3O_{24}$

M.W.: 1088.04

CAS No.: 914456-67-0

Package: mg to kg



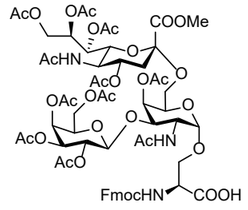
GPO-0012 Fmoc-Ser((Ac_4Galβ-3)Me,Ac_4Neu5Aca2-6AcGalNAca)-OH

M.F.: $C_{62}H_{77}N_3O_{32}$

M.W.: 1376.29

CAS No.: 174783-91-6

Package: mg to kg



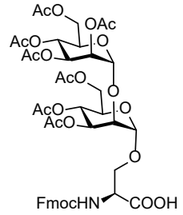
GPO-0013 Fmoc-Ser(Ac_4Mana1-2Ac_3Mana)-OH

M.F.: $C_{44}H_{51}NO_{22}$

M.W.: 945.88

CAS No.: 1427205-92-2

Package: mg to kg



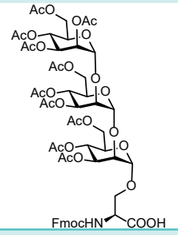
GPO-0014 Fmoc-Ser(Ac_4Mana1-2Ac_3Mana1-2Ac_3Mana)-OH

M.F.: $C_{56}H_{67}NO_{30}$

M.W.: 1234.13

CAS No.: 1427205-93-3

Package: mg to kg



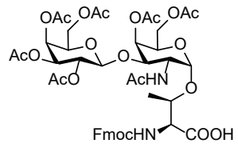
GPO-0015 Fmoc-Thr(Ac_4Galβ-3Ac_2GalNAca)-OH

M.F.: $C_{45}H_{54}N_2O_{21}$

M.W.: 958.92

CAS No.: 125760-33-0

Package: mg to kg



O-Glycopeptides

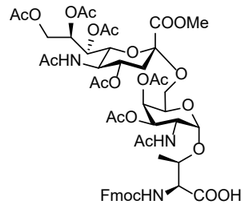
GPO-0016 Fmoc-Thr(Me,Ac_4Neu5Aca2-6Ac_2GalNAca)-OH

M.F.: $C_{51}H_{63}N_3O_{24}$

M.W.: 1102.06

CAS No.: 189561-77-1

Package: mg to kg



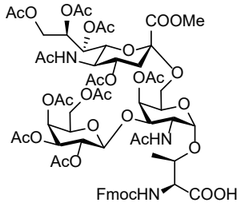
GPO-0017 Fmoc-Thr((Ac_4Galβ-3)Me,Ac_4Neu5Aca2-6AcGalNAca)-OH

M.F.: $C_{63}H_{79}N_3O_{32}$

M.W.: 1390.31

CAS No.: 174783-92-7

Package: mg to kg



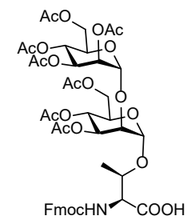
GPO-0018 Fmoc-Thr(Ac_4Mana1-2Ac_3Mana)-OH

M.F.: $C_{45}H_{53}NO_{22}$

M.W.: 959.90

CAS No.: 482576-73-8

Package: mg to kg



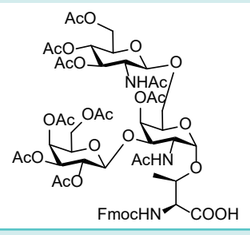
GPO-0019 Fmoc-Thr((Ac_4Galβ-3)Ac_3GlcNAcβ-6AcGalNAca)-OH

M.F.: $C_{57}H_{71}N_3O_{28}$

M.W.: 1246.19

CAS No.: 1240252-34-9

Package: mg to kg



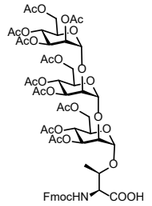
GPO-0020 Fmoc-Thr(Ac_4Mana1-2Ac_3Mana1-2Ac_3Mana)-OH

M.F.: $C_{57}H_{69}NO_{30}$

M.W.: 1248.16

CAS No.: 482576-74-9

Package: mg to kg



Glycoenzymes

Our advantages

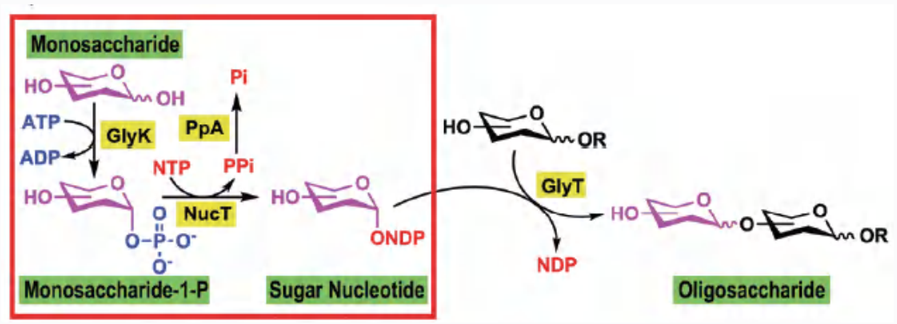
Glycogene focus on the development and production of the glycoenzymes used in the glycoscience. So far, we have obtained more than one hundred glycoenzymes from different organisms, including glycosyltransferase, glycosidase, glycokinase, glycooxidase and sugar dehydrogenase, which can be used in the synthesis, degradation, modification or detection of carbohydrates.

- Glycoenzymes: from gram to hundred grams, various packages, purity≥95%.
- Glycosyltransferase and glycosidase: applied to galactosyl, sialyl and fucosyl group with different types of linkeages and configurations, from various organisms with different substrate specificity.
- Glycokinase: phosphorylation of pentose and hexose at different sites with high specificity.
- Glycooxidase and sugar dehydrogenase: glucose dehydrogenase, galactose oxidase, galactose dehydrogenase, fructose dehydrogenase *et. al* .

Application

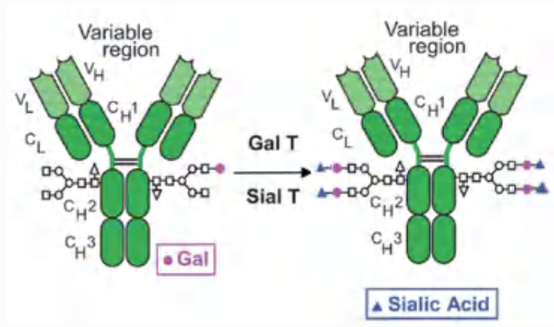
Carbohydrate synthesis

Synthesizing oligosaccharides by glycosyltransferase under mild condition is site-specific, avoiding the complex process and non-specificity in chemical synthesis. Meanwhile, glycosidase can be used to hydrolyse specific glycoside. Phosphorylation at specific site conducted by glycokinase will endow the oligosaccharides with specific function.



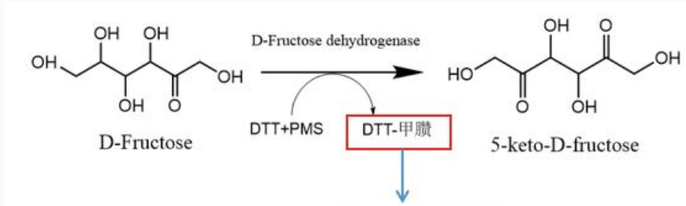
Protein glycosylation modification

Modification of the*N* - and*O* -linked sugar chain can be realized by combination use of glycosyltransferase and glycosidase, which are widely used in glycoprotein and antibody drugs.



Carbohydrate detection

Glucose dehydrogenase, galactose dehydrogenase and fructose dehydrogenase can be used to detect the corresponding saccharide in body fluid, which implies the physical condition.



Principle of fructose concentration detection kit

Glycosyltransferase

SE-1001 β1, 3-N-acetylglucosaminyltransferase (LgtA)

UDP-GlcNAc + Lactose ⟶ GlcNAcβ1, 3Galβ1, 4Glc + UDP

E.C.: 2.4.1.56

Package: 100 mU, 1 U, 5 U

Explain: *E. coli* recombinant β1, 3-N-acetylglucosaminyltransferase from *Neisseria meningitides*.

Definition: One unit is defined as the amount of enzyme that transfer 1μmol GlcNAc from UDP-GlcNAc to lactose to form GlcNAcβ1,3Lac per minute at 37ºC.

SE-1002 β1, 4-galactosyltransferase (LgtB)

GlcNAc + UDP-Gal ⟶ LacNAc + UDP

E.C.: 2.4.1.90

Package: 1 U, 5 U, 25 U

Explain: *E. coli* recombinant β1, 4-galactosyltransferase from *Neisseria meningitides*.

Definition: One unit is defined as the amount of enzyme that transfer 1μmol Gal from UDP-Gal to GlcNAc to form Galβ1,4GlcNAc per min at 37ºC.

SE-1003 α1, 4-galactosyltransferase (LgtC)

UDP-Gal + Lactose ⟶ Galα1, 4Galβ1, 4Glc + UDP

E.C.: 2.4.1.228

Package: 5 U, 25 U, 50 U

Explain: *E. coli* recombinant α1,4-galactosyltransferase from *Neisseria meningitides.*

Definition: One unit is defined as the amount of enzyme that transfer 1μmol Gal from UDP-Gal to Lactose to form Galα1,4Lac per min at 37ºC.

SE-1004 β1, 3-N-acetylgalactosaminyltransferase (LgtD)

Galα1, 4Galβ1, 4Glc + UDP-GalNAc ⟶ GalNAcβ1, 3Galα1, 4Galβ1, 4Glc + UDP

E.C.: 2.4.1.79

Package: 1 U, 5 U, 25 U

Explain: *E. coli* recombinant β1, 3-N-acetylgalactosaminyltransferase from *Neisseria meningitides.*

Definition: One unit is defined as the amount of enzyme that transfer 1μmol GalNAc from UDP-GalNAc to Galα1,4Galβ1,4Glc to form GalNAcβ1,3Galα1,4Galβ1,4Glc per min at 37ºC.

Glycosyltransferase

SE-1005 β1, 4-N-acetylgalactosaminyltransferase (CgtA)

Neu5Acα2, 3Lac + UDP-GalNAc ⟶ Neu5Acα2, 3(GalNAcβ1, 4)Lac + UDP

E.C.: 2.4.1.92

Package: 100 mU, 1 U

Explain: *E.coli* recombinant β1, 4-N-acetylgalactosaminyltransferase from *Campylobacter jejuni.*

Definition: One unit is defined as the amount of enzyme that transfer 1μmol GalNAc from UDP-GalNAc to Siaα2,3Lac to form Siaα2,3(GalNAcβ1,4)Lac per min at 37ºC.

SE-1006 B1, 3-GALACTOSYLTRANSFERASE (CGTB)

GalNAc + UDP-Gal ⟶ Galβ1, 3GalNAc + UDP

E.C.: 2.4.1.62

Package: 1 U, 5 U, 25 U

Explain: *E.coli* recombinant β1, 3-galactosyltransferase from *Campylobacter jejuni.*

Definition: One unit is defined as the amount of enzyme that transfer 1μmol Gal from UDP-Gal to lactose to form Galα1,4Lac per min at 37ºC.

SE-1007 α1, 3-N-acetylgalactosaminyltransferase (Pm1138)

GalNAc + UDP-GalNAc ⟶ GalNAcα1, 3GalNAc + UDP

E.C.: 2.4.1.40

Package: 1 U, 10 U, 100 U

Explain: *E. coli* recombinant α1, 3-N-acetylgalactosaminyltransferase from *Pasteurella multocida.*

Definition: One unit is defined as the amount of enzyme that transfer 1μmol GalNAc from UDP-GalNAc to GalNAc to form GalNAcα1,3-GalNAc per min at 37ºC.

SE-1008 α1, 3-galactosyltransferase (α1, 3GalT)

UDP-Gal + Galβ1, 4GlcOR ⟶ Galα1, 3Galβ1, 4GlcOR + UDP

E.C.: 2.4.1.87

Package: 100 mU, 1 U, 5 U

Explain: *E. coli* recombinant α1, 3-galactosyltransferase from *Bovine*.

Definition: One unit is defined as the amount of enzyme that transfer 1 μmol Gal from UDP-Gal to lactose to form Galα1, 3Lac per min at 37ºC.

Glycosyltransferase

SE-1009 β1, 4-galactosyltransferase (LgtE)

UDP-Gal + Glcα1, 4Glc ⟶ Galβ1, 4Glcα1, 4Glc + UDP

E.C.: 2.4.1.90

Package: 1 U, 5 U, 25 U

Explain: *E. coli* recombinant β1, 4-galactosyltransferase from *Neisseria gonorrhoeae.*

Definition: One unit is defined as the amount of enzyme that transfer 1μmol Gal from UDP-Gal to Glcα1,4Glc to form Galβ1,4Glcα1-4Glc per min at 37ºC.

SE-1010 α1, 3-galactosyltransferase (GTB)

Fucα1, 2Galβ1-4GlcβOR + UDP-Gal ⟶ Gal α1, 3 Fucα1, 2Galβ1, 4GlcβOR + UDP

E.C.: 2.4.1.37

Package: 0.11 U, 1 U

Explain: *E. coli* recombinant Human blood group B galactosyltransferase From *Homo sapiens.*

Definition: One unit is defined as the amount of enzyme that transfer 1μmol Gal from UDP-Gal to Fucα1,2Galβ1,4Glc to form Gal α1, 3 Fucα1, 2Galβ1, 4Glc per min at 37ºC.

SE-1011 α1, 3-N-acetylgalactosaminyltransferase (BgtA)

Fucα1, 2Galβ1, 4GlcβOR + UDP-GalNAC ⟶ Gal NAcα1, 3 FucGalβ1, 4GlcβOR + UDP

E.C.: 2.4.1.40

Package: 1 U, 5 U, 25 U

Explain: E. coli recombinant α1, 3-N-acetyl galactosaminyltransferase from Helicobacter mustelae for Human blood group A.

Definition: One unit is defined as the amount of enzyme that transfer 1μmol GalNAc from UDP-GalNAc to Fucα1, 2Galβ1, 4Glc to form GalNAcα1, 3 Fucα1, 2Galβ1, 4Glc per min at 37ºC.

SE-1012 β1, 3-galactosyltransferase (WbgO)

GlcNAcOR + UDP-Gal ⟶ Galβ1, 3GlcNAcOR + UDP

E.C.: 2.4.1.86

Package: 10 U, 100 U, 1000 U

Explain: *E. coli* recombinant β1, 3-galactosyltransferase from *Escherichia coli O55:H7*.

Definition: One unit is defined as the amount of enzyme that transfer 1μmol Gal from UDP-Gal to GlcNAc to form Galβ1,3GlcNAc per min at 37ºC.

Glycosyltransferase

SE-1013 α2, 6-sialyltransferase (Pd26ST)

Lactose + CMP-Neu5Ac ⟶ Neu5Acα2, 6Galβ1, 4Glc + CMP

E.C.: 2.4.99.1

Package: 10 U, 50 U, 100 U

Explain: *E. coli* recombinant α2, 6-sialyltransferase from *Photobacterium damsel.*

Definition: One unit is defined as the amount of enzyme that transfer 1μmol Neu5Ac from CMP-Neu5Ac to lactose to form Siaα2,6Lac per min at 37ºC.

SE-1014 α2, 3-sialyltransferase (PmST1)

Lactose + CMP-Neu5Ac ⟶ Neu5Acα2, 3Galβ1, 4Glc + CMP

E.C.: 2.4.99.4

Package: 50 U, 250 U, 1000 U

Explain: *E. coli* recombinant α2, 3-sialyltransferase from *Pasteurella multocida.*

Definition: One unit is defined as the amount of enzyme that transfer 1μmol Neu5Ac from CMP-Neu5Ac to lactose to form Siaα2,3Lac per min at 37ºC.

SE-1015 α2, 8-sialyltransferase (Cst Ⅱ)

Neu5Acα2, 3/6Galβ1, 4Glc + CMP-Neu5Ac ⟶ (Neu5Acα2, 8)Neu5Acα2, 3/6Galβ1, 4Glc + CMP

E.C.: 2.4.99.8

Package: 10 U, 50U, 250 U

Explain: *E. coli* recombinant α2, 8-sialyltransferase from *Campylobacter jejuni.*

Definition: One unit is defined as the amount of enzyme that transfer 1μmol Neu5Ac from CMP-Neu5Ac to Siaα2,3Lac to form Siaα2,8 Siaα2,3Lac per min at 37ºC.

SE-1016 α2, 3-sialyltransferase (PmST3)

Galβ1, 4GlcβSph + CMP-Neu5Ac ⟶ Neu5Acα2, 3Galβ1, 4GlcβSph + CMP

E.C.: 2.4.99.4

Package: 10 U, 50U, 250 U

Explain: *E.coli* recombinant α2, 3-sialyltransferase for oligosaccharides and glycolipids from *Pasteurella multocida.*

Definition: One unit is defined as the amount of enzyme that transfer 1μmol Neu5Ac from CMP-Neu5Ac to lac-Sph to form Siaα2,3Lac-Sph per min at 37ºC.

Glycosyltransferase

SE-1017 α2, 3-sialyltransferase (Phα2, 3SiaT)

Gal-OR + CMP-Neu5Ac ⟶ Neu5Acα2, 3Gal-OR + CMP

E.C.: 2.4.99.4

Package: 10 U, 50 U, 250 U

Explain: *E. coli* recombinant α2, 3-sialyltransferase from *Photobacterium phosphoreum.*

Definition: One unit is defined as the amount of enzyme that transfer 1μmol Neu5Ac from CMP-Neu5Ac to lactose to form Siaα2,3Lac per min at 37ºC.

SE-1018 α1, 3-fucosyltransferase (α1, 3FucT)

Neu5Acα2, 3Galβ1, 4GlcNAcβOR + GDP-Fuc ⟶ Neu5Acα2, 3 Fuα1, 3(Gal β1, 4)GlcNAcβOR + GDP
Gal β1, 4GlcNAcβOR + GDP-Fuc ⟶ Fuα1, 3(Gal β1, 4)GlcNAcβOR + GDP

E.C.: 2.4.1.65

Package: 1 U, 5 U

Explain: *E. coli* recombinant α1, 3-fucosyltransferase from *Helicobacter pylori.*

Definition: One unit is defined as the amount of enzyme that transfer 1μmol Fucose from GDP-Fuc to Gal β1-4GlcNAc to form Fuα1,3 (Gal β1-4)GlcNAc per min at 37ºC.

SE-1019 α1, 2-fucosyltransferase (α1, 2FucT)

Galβ1, 4GlcOR + GDP-Fuc ⟶ Fucα1, 2Galβ1, 4GlcOR + GDP

E.C.: 2.4.1.69

Package: 1 U, 5 U, 25 U

Explain: *E. coli* recombinant α1, 2-fucosyltransferase from *Helicobacter pylori.*

Definition: One unit is defined as the amount of enzyme that transfer 1μmol Fucose from GDP-Fuc to lactose to form Fucα1,2Lac per min at 37ºC.

SE-1020 α1, 3/4-fucosyltransferase (α1, 3/4FucT)

ROH Acceptor + GDP-Fuc ⟶ Fucα3/4OR + GDP

E.C.: 2.4.1.65

Package: 10 mU, 100 mU

Explain: *E. coli* recombinant α1, 3/4-fucosyltransferase from *Helicobacter pylori.*

Definition: One unit is defined as the amount of enzyme that catalyzes the transfer of 1 μmol Fuc from GDP-Fuc to acceptor per minute at 37ºC.

Sugar-nucleotide synthase

SE-2001 CMP-Neu5Ac synthetase (NmCSS)

Neu5Ac + CTP ⟶ CMP-Neu5Ac + PPi

E.C.: 2.7.7.43

Package: 10 U, 50 U, 250 U

Explain: *E. coli* recombinant CMP-Neu5Ac synthetase from *Neisseria meningitidis.*

Definition: One unit is defined as the amount of enzyme that catalyzes the formation of 1 μmol CMP-Neu5Ac from CTP and Neu5Ac per minute at 37ºC.

SE-2002 L-fucokinase/GDP-fucose pyrophos phorylase (FKP)

L-Fuc + ATP ⟶ Fuc-1-P + ADP or Fuc-1-P + GTP ⟶ GDP-Fuc + PPi

E.C.: 2.7.1.52/2.7.7.30

Package: 5 U, 25 U, 200 U

Explain: *E. coli* recombinant L-fucokinase/GDP-fucose pyrophosphorylase from *Bacteroides fragilis.*

Definition:One unit is defined as the amount of enzyme that cosune 1 μmol ATP and L-Fuc to form Fuc-1-P per min at 37ºC.

SE-2003 UDP-sugar pyrophosphorylase (BlUSP)

Gal-1-P + UTP ⟶ UDP-Gal + PPi

E.C.: 2.7.7.64

Package: 10 U, 50 U, 200 U

Explain: *E. coli* recombinant UDP-sugar pyrophosphory- lase from *Bifidobacterium longum.*

Definition: One unit is defined as the amount of enzyme that catalyzes the formation of 1 μmol of UDP-Gal from Gal-1-P and UTP per minute at 37ºC.

SE-2004 N-acetylglucosamine-1-P uridyltransferase (AgX1)

GlcNAc-1-P + UTP ⟶ UDP-GlcNAc + PPi

E.C.: 2.3.1.157

Package: 5 U, 25 U, 200 U

Explain: *E. coli* recombinant N-acetylglucosamine-1-P uridyltransferase from *Homo sapiens.*

Definition: One unit is defined as the amount of enzyme that catalyzes the formation of UDP-GlcNAc from GlcNAc-1-P and 1 μmol UTP per minute at 37ºC.

Sugar-nucleotide synthase

SE-2005 UDP-sugar pyrophosphorylase (AtUSP)

Gal-1-P + UTP ⟶ UDP-Gal + PPi

E.C.: 2.7.7.64

Package: 10 U, 50 U, 200 U

Explain: *E. coli* recombinant UDP-sugar pyrophosphorylase from *Arabidopsis thaliana*.

Definition: One unit is defined as the amount of enzyme that catalyzes the formation of UDP-Gal from Gal-1-P and 1 μmol UTP per minute at 37°C.

SE-2006 GDP-mannose pyrophosphorylase (PH0925-DN350)

Man-1-P + GTP ⟶ GDP-Man + PPi

E.C.: 2.7.7.13

Package: 10 U, 100 U

Explain: *E. coli* recombinant GDP-mannose pyrophosphorylase from *Pyrococcus horikoshii*.

Definition: One unit is defined as the amount of enzyme that catalyzes the formation of 1 μmol GDP-Man from Man-1-P and GTP per minute at 37°C.

SE-2007 GlcNAc 1-P uridyltransferase (PmGlmU)

GlcNAc-1-P + UTP ⟶ UDP-GlcNAc + PPi

E.C.: 2.3.1.157

Package: 1 U, 5 U, 25 U

Explain: *E. coli* recombinant GlcNAc 1-P uridyltransferase From *Pasteurella multocida*.

Definition: One unit is defined as the amount of enzyme that catalyzes the formation of 1 μmol UDP-GlcNAc from GlcNAc-1-P and UTP per minute at 37°C.

SE-2008 GlcNAc 1-P uridyltransferase (CjGlmU)

GlcNAc-1-P + UTP ⟶ UDP-GlcNAc + PPi

E.C.: 2.3.1.157

Package: 1 U, 5 U, 25 U

Explain: *E.coli* recombinant Galcuronokinase from *Campylobacter jejuni*.

Definition: One unit is defined as the amount of enzyme that catalyzes the formation of 1 μmol UDP-GlcNAc from GlcNAc-1-P and UTP per minute at 37°C.

Sucrose synthase

SE-2009 Sucrose synthase,OcSUS1

Sucrose + UDP ⟶ fructose + UDP-glucose

E.C.: 2.4.1.13

Package: 1 U, 5 U, 25 U

Explain: *E. coli* recombinant sucrose synthase from *Oraithogalum caudatum*.

Definition: One unit is defined as the amount of enzyme that catalyzes the formation of UDP-glucose from sucrose and 1 μmol UDP per minute at 37°C.

Hydrolase

SE-3001 Endo-β-N-acetylglucosaminidase(Double antenna complex type) (Endo S)

E.C.: 3.2.1.96

Package: 1000 U, 5000 U

Explain: *E. coli* recombinant Endo-β-N-acetylglucosaminidase (Double antenna complex type)from *Streptococcus pyogenes*.

Definition: One unit is defined as the amount of enzyme required to remove > 95% of the carbohydrate from 5 μg of native mouse monoclonal IgG in 1 hour at 37ºC in a total reaction volume of 10 μl.

SE-3002 Endo-β-N-acetylglucosaminidase (high-mannose, hybrid, bisect complex-type N-glycan) (Endo S2)

E.C.: 3.2.1.96

Package: 200 U, 2 KU

Explain: *E. coli* recombinant Endo-β-N-acetylglucosaminidase (high-mannose, hybrid, bisect complex-type N-glycan) from *Streptococcus pyogenes*.

Definition: One unit is defined as the amount of enzyme required to remove > 95% of the carbohydrate from 5 μg of native mouse monoclonal IgG in 1 hour at 37°C in a total reaction volume of 10 μl.

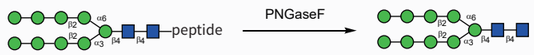
SE-3018 Endo-β-N-acetylglucosaminidase (high-mannose, hybrid, bisect complex-type N-glycan);Endo S2(D184M)

E.C.: 3.2.1.96

Package: 10 U, 5 U, 25 U

Definition: One unit is defined as the amount of enzyme required to remove > 95% of the carbohydrate from 5 μg of native mouse monoclonal IgG in 1 hour at 37°C in a total reaction volume of 10 μl.

SE-3003 Peptide-N-Glycosidase F (high mannose, hybrid, and complex oligosaccharides from N-linked glycoproteins) (PNGase F)



E.C.: 3.5.1.52

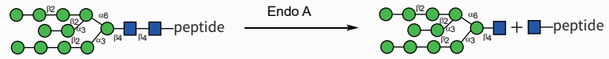
Package: 1500 U, 7500 U, 50000 U

Explain: *E. coli* recombinant Peptide-N-Glycosidase F (high mannose, hybrid, and complex oligosaccharides from N-linked glycoproteins)from *Flavobacterium meningosepticum*.

Definition: One unit is defined as the amount of enzyme required to remove > 95% of the carbohydrate from 10 μg of denatured RNase B in 1 hour at 37°C in a total reaction volume of 10 μl.

Hydrolase

SE-3004 Endo-β-N-acetylglucosaminidase (high-mannose, hybrid N-glycan) (Endo A)



E.C.: 3.2.1.96

Package: 200 U, 1 kU

Explain: *E. coli* recombinant Endo-β-N-acetylglucosaminidase (high-mannose, hybrid N-glycan))from *Arthrobacter protophormiae*.

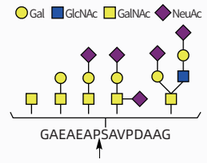
Definition: One unit is defined as the amount of enzyme required to remove > 95% of the carbohydrate from 10 μg of denatured RNase B in 1 hour at 37°C in a total reaction volume of 10 μl.

SE-3005 Glycopeptidase (IMPa)

E.C.: 5.3.1.52

Package: 1 U, 10 U, 25 U

Explain: *E. coli* recombinant peptidase from *Pseudomonas aeruginosa*.



Definition: One unit is defined as the amount of enzyme that catalyzes the formation of 1 μmol GalNAc from O-GalNAcylated peptides per minute at 37°C.

SE-3006 Endoglycoceramidase II (EGCaseII)

GM1-F + Sph ⟶ GM1-sph + F

E.C.: 3.2.1.123

Package: 1 U, 5 U, 25 U

Explain: *E. coli* recombinant endoglycoceramidase II from *Lactobacillus casei*.

Definition: One unit is defined as the amount of enzyme that catalyzes the formation of GM1-sph from 1 μmol sphingosine and GM1-F per minute at 37°C.

SE-3007 Endoglycoceramidases I (EGCaseI)

GM1-sph ⟶ GM1 + Sph

E.C.: 3.2.1.123

Package: 100 U

Explain: *E. coli* recombinant endoglycoceramidases I from *Rhodococcus strain M-777*.

Definition: One unit is defined as the amount of enzyme that catalyzes the formation of 1 μmol GM1-sph from GM1 per minute at 37°C.

Hydrolase

SE-3008 Nucleoside hydrolase (IAGNH)

Adenosine ⟶ D-ribose + Adenine

E.C.: 3.2.2.2

Package: 100 U , 1000 U

Explain: *E. coli* recombinant nucleoside hydrolase from *Trypanosoma brucei brucei.*

Definition: One unit is defined as the amount of enzyme that catalyzes the formation of 1 μmol adenine from adenosine per minute at 37°C.

SE-3009 Alkaline phosphatase (ALP)

AMP ⟶ Adenosine + Pi

E.C.: 3.1.3.1

Package: 100 U, 1 kU

Explain: *E. coli* recombinantE. coli recombinant alkaline phosphatase from *Shewanella .sp*.

Definition: One unit is defined as the amount of enzyme that catalyzes the formation of 1 μmol adenosine from AMP per minute at 37°C.

SE-3010 Sialidase isoenzyme S (Ganglioside sialidase) (AuSialidase S)

Neu5Acα2,3Galβ1,4Glc ⟶ Galβ1,4Glc + Neu5Ac

E.C.: 3.2.1.18

Package: 1 U, 5 U, 25 U

Explain: *E. coli* recombinant Sialidase isoenzyme S from *Arthrobacter ureafaciens*.

Definition: One unit is defined as the amount of enzyme that catalyze the 6'SL generation of 1 μmol lactose and Neu5Ac per minute at 37°C.

SE-3011 Sialidase isoenzyme M2 (AuSialidase M2)

Neu5Acα2, 3Galβ1, 4Glc-Ceramide ⟶ Galβ1, 4Glc-Ceramide + Neu5Ac

E.C.: 3.2.1.18

Package: 1 mg, 10 mg

Explain: *E.coli* recombinant Sialidase isoenzyme M2 from *Arthrobacter ureafaciens*.

Definition: One unit is defined as the amount of enzyme that catalyzes the formation of 1 μmol Neu5Ac from Neu5Acα2, 3Galβ1, 4Glc Ceramide per minute at 37°C.

Hydrolase

SE-3012 α2, 3/6-sialidase (BiNanH2)

Neu5Acα2, 3/6 Galβ1, 4Glc ⟶ Galβ1, 4Glc + Neu5Ac

E.C.: 3.2.1.18

Package: 1 ku, 5 ku

Explain: α2, 3/6 Sialidase catalyzes the hydrolysis of α2, 3, α2, 6 linked sialic acid residues from glycoproteins and oligosaccharides,*E. coli* recombinant α 2, 3, 6 sialidase from *Bifidobacterium longum subsp. Infantis*.

Definition: One unit is defined as the amount of enzyme that catalyze the Neu5Acα2,6Galβ1,4Glc generation of 1 μmol lactose and Neu5Ac per minute at 37°C.

SE-3013 α2, 3/6/8 sialyl glycosidase (SpNanA)

Neu5Acα2, 3/6/8 Neu5Ac ⟶ Neu5Ac

E.C.: 3.2.1.18

Package: 1 ku, 5 ku

Explain: α2, 3/6/8 sialidase catalyzes the hydrolysis of α2, 3, α2, 6, α2, 8 linked sialic acid residues from glycoproteins and oligosaccharides,*E. coli* recombinant α2, 3/6/8 sialidase from *Bifidobacterium longum subsp. Infantis*.

Definition: One unit is defined as the amount of enzyme that catalyzes the formation of 1 μmol Neu5Ac from Neu5Acα2, 3/6/8 Neu5Ac per minute at 37°C.

SE-3014 α2, 6-sialidase (Ps26PSia)

Neu5Acα2,6Galβ1,4Glc ⟶ Galβ1,4Glc+ Neu5Ac

E.C.: 3.2.1.18

Package: 100U, 1000 U

Explain: α2,6-sialidase catalyzes the hydrolysis of α2,6-linked sialic acid residues from glycoproteins and oligosaccharides,*E. coli* recombinant α2,6- sialidase from *Photobacterium sp*.

Definition: One unit is defined as the amount of enzyme that catalyzes the formation of 1 μmol Neu5Ac from Neu5Acα2,6Galβ1,4Glc per minute at 37°C.

SE-3015 β - Galactosidase (EcLacZ)

Galβ1, 4Glc ⟶ Gal+Glc

E.C.: 3.2.1.123

Package: 100 U, 1000 U

Explain: β-galactosidase catalyzes the hydrolysis of Galβ1,4Glc,*E. coli* recombinant β-galactosidase from *E. coli*.

Definition: One unit is defined as the amount of enzyme that catalyzes the hydrolysis of 1 μmol Galβ1,4Glc per minute at 37°C.

Hydrolase

SE-3016 α1, 3/4-fucosidase (BbAfcB)

Galβ1,4(Fucα1,3)Glc ⟶ Galβ1,4Glc+Fuc

E.C.: 3.2.1.111

Package: 1 U, 10 U

Explain: α1,3/4-fucosidase catalyzes the hydrolysis of α1,3-linked fucose residues from Galβ1,4(Fucα1,3)Glc,*E. coli* recombinant α1,3/4-fucosidase from *Bifidobacterium bifidum*.

Definition: One unit is defined as the amount of enzyme that catalyzes the hydrolysis of 1 μmol Galβ1,4(Fucα1,3)Glc per minute at 37°C.

SE-3017 α1, 2-fucosidase (BbAfcA)

Fucα1,2Galβ1,4Glc ⟶ Galβ1,4Glc+Fuc

E.C.: 3.2.1.111

Package: 1 U, 10 U

Explain: α 1-2 fucosidase catalyzes the hydrolysis of α 1-2 linked fucose residues from Fucα1,2Galβ1,4Glc,*E. coli* recombinant α 1-2 fucosidase from *Bifidobacterium bifidum*.

Definition: One unit is defined as the amount of enzyme that catalyzes the hydrolysis of 1 μmol Fucα1,2Galβ1,4Glc per minute at 37°C.

SE-3019 Inorganic pyrophosphatase (PmPPA)

$P_2O_7^{-4} + H_2O \longrightarrow 2HPO_4^{-2}$

E.C.: 3.6.1.1

Package: 100 U, 1 kU

Explain: *E.coli* recombinant inorganic pyrophosphatase from *Pasteurella multocida*.

Definition: One unit is defined as the amount of enzyme that catalyzes the formation of 1 μmo inorganic phosphate from inorganic pyrophosphate per minute at 37°C.

SE-4010 α1, 6-fucosidase (LpAlfC(E274A))

GlcNAc-peptides + GDP-Fuc ⟶ α-Fucosyl fluoride

E.C.: 3.2.1.51

Package: 5 U, 10 U

Explain: *E.coli* recombinant α1, 6-fucosidase from *Lactobacillus casei*.

Definition: One unit is defined as the amount of enzyme that catalyzes the formation of 1 μmol Fucα1, 6GlcNAc-peptides from GlcNAc-peptides and GDP-Fuc per minute at 37°C.

Generic type

SE-4001 UDP-Glc dehydrogenase (UGDH)

UDP-glucose + NAD ⟶ UDP-glucuronic + NADH

E.C.: 1.1.1.22

Package: 1 U, 5 U, 10 U

Explain: *E. coli* recombinant uridine-5-diphosphoglucose dehydrogenase from *Streptococcus pyogenes*.

Definition: One unit will oxidize 1.0 μmol of UDP-glucose to UDP-glucuronic acid per minute at pH 8.7 at 25°C.

SE-4002 Glucose dehydrogenase (BsGDH)

D-glucose + NAD^+ ⟶ D-Glucuronic + NADH

E.C.: 1.1.1.47

Package: 1 U, 5 U, 25 U

Explain: *E. coli* recombinant E. coli recombinant Glucose dehydrogenase from *Bacillus subtilis*.

Definition: One unit is defined as the amount of enzyme that consume 1μmol NADP+ to form D-Glucuronic acid and NADH per min at 37ºC.

SE-4003 Adenosine deaminase (RnADA)

Adenosine ⟶ Inosine

E.C.: 3.5.4.4

Package: 1 kU, 5 kU

Explain: *E. coli* recombinant adenosine deaminase from *Rattus norvegicus*.

Definition: One unit is defined as the amount of enzyme that catalyzes the formation of 1 μmol inosine from adenosine per minute at 37ºC.

SE-4004 UDP-Glc 4-epimerase (GalE)

UDP-Glc ⟶ UDP-Gal

E.C.: 5.1.3.2

Package: 50 U, 500 U

Explain: *E.coli* recombinant UDP-Glc 4-epimerase from *E. coli*.

Definition: One unit is defined as the amount of enzyme that catalyzes the formation of 1 μmol of UDP-Gal from UDP-Glc per minute at 37ºC.

Generic type

SE-4005 D-Mannose Isomerase (PsMaSeAF)

D-fructose ⟶ D-mannose

E.C.: 5.3.1.7

Package: 1 U, 5 U

Explain: *E. coli* recombinant D-Mannose Isomerase from *Pseudomonas syringae*.

Definition: One unit is defined as the amount of enzyme that catalyzes the formation of 1 μmol D-mannose from D-fructose per minute at 37°C.

SE-4006 Sphingolipid ceramide N-deacylase (SCDase)

Gg4-sph + fatty acids ⟶ Gg4cer

E.C.: 3.5.1.69

Package: 100 mU, 1 U

Explain: *E. coli* recombinant Sphingolipid ceramide N-deacylase from *Shewanella alga*.

Definition: One unit is defined as the amount of enzyme that catalyzes the formation of 1 μmol Gg4cer from Gg4-sph and fatty acids C18 per minute at 37°C.

SE-4007 Pasteurella multocida Hyaluronan synthase (PmHAS)

UDP-GlcNAc + UDP-GlcA ⟶ (GlcNAcβ1, 4GlcA)n

E.C.: 2.4.1.212

Package: 1 U, 5 U, 10 U

Explain: *E.coli* recombinant Hyaluronan synthase from Pasteurella multocida.

Definition: One unit is defined as the amount of enzyme that catalyzes the formation of 1 μmol Hyaluronan from UDP-GlcNAc and UDP-GlcA per minute at 37°C.

SE-4008 Creatine kinase (OcCK)

ATP + creatine ⟶ ADP + phosphocreatine

E.C.: 2.7.3.2

Package: 50 U, 500 U

Explain: *E. coli* recombinant Creatine kinase from *Oryctolagus cuniculus*.

Definition: One unit is defined as the amount of enzyme that consume 1μmol ATP to form phosphocreatine and ADP per min at 37ºC.

Generic type

SE-4009 Acetate kinase (ACK)

ADP + Acetyl-phosphate ⟶ ATP + Acetate

E.C.: 2.7.2.1

Package: 100 U, 1 kU

Explain: *E.coli* recombinant acetate kinase from *E.coli*.

Definition: One unit is defined as the amount of enzyme that catalyzes the formation of 1 μmol ATP from ADP and acetyl phosphate per minute at 37ºC.

SE-4011 α1, 6-fucosidase (LpAlfC)

Fucα1, 6GlcNAc-peptides ⟶ GlcNAc-peptides + Fucose

E.C.: 3.2.1.51

Package: 1 U, 5 U

Explain: Exoglycosidases capable of cleavingα 1, 6 linked L-fucose residues from fucosyloligosaccharides, *E.coli* recombinant α 1, 6-fucosidase from *Lactobacillus casei*.

Definition: One unit is defined as the amount of enzyme that catalyzes the formation of 1 μmol GlcNAc-peptides from Fucα1, 6GlcNAc-peptides per minute at 37ºC.

SE-4012 Sialic acid aldolase (CgNal)

ManNAc + Pyuvate ⟶ Neu5Ac

E.C.: 4.1.3.3

Package: 10 U, 50 U

Explain: *E. coli* recombinant Sialic acid aldolase from *Corynebacterium glutamicum*.

Definition: One unit is defined as the amount of enzyme that catalyzes the formation of 1 μmol Neu5Ac from ManNAc and Pyuvate per minute at 37ºC.

SE-4013 N-acetylhexosamine kinase (NahK)

GlcNAc/ GalNAc + ATP ⟶ GlcNAc-1-P/ GalNAc-1-P + ADP

E.C.: 2.7.1.162

Package: 10 U, 50 U, 100 U

Explain: *E. coli* recombinant N-acetylhexosamine kinase from *Bifidobacterium longum*.

Definition: One unit is defined as the amount of enzyme that catalyzes the formation of 1 μmol of GlcNAc-1-P from GlcNAc and ATP per minute at 37ºC.

Generic type

SE-4014 Galactokinase (BiGalK)

Gal + ATP ⟶ Gal-1-P + ADP

E.C.: 2.7.1.6

Package: 100 U, 1000 U

Explain: *E. coli* recombinant galactokinase from *Bifidobacterium infantis*.

Definition: One unit is defined as the amount of enzyme that consume 1μmol ATP to form Gal-1-P and ADP per min at 37ºC.

SE-4015 Glucuronokinase (AtGlcAK)

ATP + GlcA ⟶ GlcA-1-P + ADP

E.C.: 2.1.7.43

Package: 1 U, 5 U, 25 U

Explain: *E. coli* recombinant glucuronokinase from *Arabidopsis thaliana*.

Definition: One unit is defined as the amount of enzyme that consume 1μmol ATP and GlcA to form GlcA-1-P and ADP per min at 37ºC.

SE-4016 Galcuronokinase (AtGalAK)

ATP + GalA ⟶ GalA-1-P + ADP

E.C.: 2.7.1.44

Package: 1 U, 5 U, 25 U

Explain: *E. coli* recombinant galcuronokinase from *Arabidopsis thaliana*.

Definition: One unit is defined as the amount of enzyme that consume 1μmol ATP and GalA to form GalA-1-P and ADP per min at 37ºC.

SE-4017 Hexokinase (HsHKI)

Glucose+ATP ⟶ Glucose-6-P+ADP

E.C.: 2.7.1.1

Package: 1 U, 5 U, 25 U

Explain: *E.coli* recombinant hexokinase from *Homo sapiens*.

Definition: One unit is defined as the amount of enzyme that consume 1μmol ATP and glucose to form Glucose-6-P and ADP per min at 37ºC.

Generic type

SE-4018 GlcNAc kinase (EcNagK)

GlcNAc+ATP ⟶ GlcNAc-6-P+ADP

E.C.: 2.7.1.59

Package: 10 U, 50 U, 100 U

Explain: *E.coli* recombinant galactose dehydrogenase from *E. coli*.

Definition: One unit is defined as the amount of enzyme that consume 1μmol ATP and GlcNAc to form GlcNAc-6-P and ADP per min at 37ºC.

SE-4019 PfGalDH (Galactose dehydrogenase)

Galactose+NAD ⟶ galacturonic acid+NADH

E.C.: 1.1.1.48

Package: 10 U, 50 U, 100 U

Explain: *E.coli* recombinant galactose dehydrogenase from *Pseudomonas fluorescens*.

Definition: One unit is defined as the amount of enzyme that catalyzes the formation of 1 μmol NADH from Galactose and NAD per minute at 37℃.

SE-4020 RsHexNacO (N-acylhexosamine oxidase)

N-acetyl-D-glucosamine+O_2+H_2O ⟶ N-acetyl-D-glucosaminate+H_2O_2

E.C.: 1.1.3.29

Package: 10 U, 50 U 100 U

Explain: *E. coli* recombinant N-acylhexosamine oxidase from *Ralstonia solanacearum*.

Definition: One unit is defined as the amount of enzyme that catalyzes the formation of 1 μmol H_2O_2 per minute at 37℃.

SE-4021 EcDeoB (phosphopentomutase)

Ribose-5-P ⟶ Ribose-1-P

E.C.: 5.4.2.7

Package: 10 U, 50 U, 100 U

Explain: *E. coli* recombinant phosphopentomutase from *E. coli*.

Definition: One unit is defined as the amount of enzyme that catalyzes the formation of 1 μmol Ribose-1-P per minute at 37℃.

Generic type

SE-4022 fructose dehydrogenase (FDH)

D-fructose ⟶ keto-D-fructose

E.C.: 1.1.99.11

Package: 25 U, 250 U, 2500 U

Explain: D-Fructose Dehydrogenase extracted from *Gluconobacter sp.*

Definition: One unit is defined as the amount of enzyme that transfer 1μmol D-fructose to 5-ketofructose per min at pH 4.5 at 37°C.

SE-4023 Sialic acid aldolase (EcNPL)

ManNAc + Pyruvate ⟶ Neu5Ac

E.C.: 4.1.3.3

Package: 10 U, 50 U

Explain: *E. coli* recombinant sialic acid aldolase from *E. coli*.

Definition: One unit is defined as the amount of enzyme that catalyzes the formation of 1 μmol Neu5Ac from ManNAc and Pyruvate per minute at 37°C.

SE-4024 D-galactosyl-β1, 3-N-acetyl-D-hexosamine phosphorylase (BiGalHexNAcP)

GlcNAcOR+ Gal-1-P ⟶ Galβ1, 3GlcNAcOR + PPi

E.C.: 2.4.1.211

Package: 5 U, 25 U

Explain: *E.coli* recombinant D-galactosyl-β1, 3-N-acetyl-D-hexosamine phosphorylase from *Bifidobacterium infantis*.

Definition: One unit is defined as the amount of enzyme that catalyzes the formation of Galβ1,3GlcNac from Gal-1-P and 1 μmol GlcNac per minute at 37°C.

SE-4025 Ketohexokinases,KHK-C

fructose+ATP ⟶ fructose-1-P+ADP

E.C.: 2.7.1.3

Package: 50 U, 250 U, 1 kU

Explain: *E. coli* recombinant ketohexokinases from *Homo sapiens*.

Definition: One unit is defined as the amount of enzyme that consume 1μmol ATP and fructose to form fructose-1-P per min at 37°C.

Glycosylation modification Tool enzymes -- Help the development of sugar bioscience

Glycosylation modification is a widespread type of protein post-translational modification, mainly occurring in the endoplasmic reticulum and Golgi apparatus. It plays an important role in cell growth, differentiation and metabolism, protein folding and degradation, viral and bacterial recognition, signaling, and fertilization.

Correct glycosylation of proteins affects the stability, immunogenicity, metabolic properties and biological activity of proteins. At present, the research on glycosylation and functional properties of glycoproteins has become a hot topic in the field of glycobiology.

GLYCOGENE has advanced eukaryotic expression technology platform, can provide a variety of human sources of glycosyltransferase, glycosidase to facilitate protein glycosylation modification, glycopeptide synthesis and various O-sugar and N-sugar synthesis.

We have eukaryotic expression systems such as yeast, baculovirus-insect cells, mammalian cells, etc., capable of synthesizing enzymes with high biological activity, and can use bioreactors to scale up production to meet the needs of scientific research and industry.

Galactose transferase

GE-1001 beta-1,4-Galactosyltransferase 1 (B4GalT1)

D-glucose + UDP-alpha-D-galactose ⟶ H^+ + lactose + UDP

E.C.: 2.4.1.22

Package: 20 ug, 100 ug, 1 mg

Explain: Trichoplusia ni, High Five(baculovirus)-derived human beta-1,4-Galactosyltransferase 1/B4GalT1 protein.

Definition: Measured by its ability to transfer galactose from UDP-galactose to N-Acetyl-alpha -D-glucosamine.

GE-1002 beta-1,4-Galactosyltransferase 1 (B4GalT1 (Y285L))

GlcNAc+UDP-GalNAc ⟶ GalNAc(β1–4）GlcNAc+UDP

E.C.: 2.4.1-

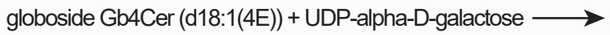
Package: 20 ug, 100 ug, 1 mg

Explain: Trichoplusia ni, High Five(baculovirus)-derived human beta-1,4-Galactosyltransferase 1/B4GALT1 protein.

Definition: Measured by its ability to transfer N-Acetyl-D-galactosamine from UDP-GalNAc to N-Acetyl-D-glucosamine.

Galactose transferase

GE-1003 Beta-1,3-galactosyltransferase 5 (B3GalT5)



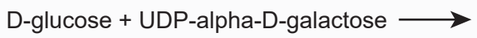
E.C.: 2.4.1-

Package: 20 ug, 100 ug, 1 mg

Explain: Chinese Hamster Ovary cell line, CHO-derived human B3GalT5 protein.

Definition: Measured by its ability to transfer galactose from UDP-galactose to N-Acetyl-alpha -D-glucosamine.

GE-1004 beta-1,4-Galactosyltransferase 2 (B4GalT2)



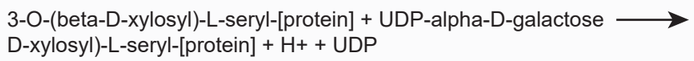
E.C.: 2.4.1.22

Package: 20 ug, 100 ug, 1 mg

Explain: Trichoplusia ni, High Five(baculovirus)-derived human beta-1,4-Galactosyltransferase 2/B4GalT2 protein.

Definition: Measured by its ability to transfer galactose from UDP-galactose to glucose.

GE-1005 beta-1,4-Galactosyltransferase 7 (B4GalT7)



E.C.: 2.4.1.133

Package: 20 ug, 100 ug, 1 mg

Explain: Human embryonic kidney cell, HEK293-derived human Beta-1,4-Galactosyltransferase 7/B4GalT7 protein.

Definition: Measured by its ability to transfer galactose from UDP-Galactose to D-Xylose.

GalNAc transferase

GE-1101 UDP-GalNAc:beta-1,3-N-acetylgalactosaminyltransferase 2 (B3GALNT2)

3-O-(N-acetyl-beta-D-glucosaminyl-(1->4)-alpha-D-mannosyl)-L-threonyl-[protein] + UDP-N-acetyl-alpha-D-galactosamine = 3-O-[beta-D-GalNAc-(1->3)-beta-D-GlcNAc-(1->4)-alpha-D-Man]-L-Thr-[protein] +H+UDP

E.C.: 2.4.1.313

Package: 20 ug, 100 ug, 1 mg

Explain: Chinese Hamster Ovary cell line, CHO-derived human B3GALNT2 protein.

Definition: Measured by its ability to transfer GalNAc from UDP-GalNAc to benzyl-GlcNAc.

GE-1102 Polypeptide N-acetylgalactosaminyltransferase 1 (GALNT1)

L-seryl-[protein] + UDP-N-acetyl-alpha-D-galactosamine = 3-O-[N-acetyl-alpha-D-galactosaminyl]-L-seryl-[protein] + H+ + UDP

E.C.: 2.4.1.41

Package: 20 ug, 100 ug, 1 mg

Explain: Trichoplusia ni, High Five(baculovirus)-derived human Polypeptide GalNac Transferase 1/GALNT1 protein.

Definition: Measured by its ability to transfer GalNAc from UDP-GalNAc to peptide EA2 .

GE-1103 Polypeptide N-acetylgalactosaminyltransferase 2 (GALNT2)

L-seryl-[protein] + UDP-N-acetyl-alpha-D-galactosamine = 3-O-[N-acetyl-alpha-D-galactosaminyl]-L-seryl-[protein] + H+ + UDP

E.C.: 2.4.1.41

Package: 20 ug, 100 ug, 1 mg

Explain: Trichoplusia ni, High Five(baculovirus)-derived human GALNT2 protein.

Definition: Measured by its ability to transfer GalNAc from UDP-GalNAc to peptide EA2.

GE-1104 Polypeptide N-acetylgalactosaminyltransferase 3 (GALNT3)

E.C.: 2.4.1.41

Package: 20 ug, 100 ug, 1 mg

Explain: Trichoplusia ni, High Five(baculovirus)-derived human Polypeptide GalNac Transferase 3/GALNT3 protein.

Definition: Measured by its ability to transfer GalNAc from UDP-GalNAc to peptide EA2.

GALNAc transferase

GE-1105 Polypeptide N-acetylgalactosaminyltransferase 4 (GALNT4)

gL-seryl-[protein] + UDP-N-acetyl-alpha-D-galactosamine = 3-O-[N-acetyl-alpha-D-galactosaminyl]-L-seryl-[protein] + H+ + UDP

E.C.: 2.4.1.41

Package: 20 ug, 100 ug, 1mg

Definition: Measured by its ability to transfer GalNAc from UDP-GalNAc to peptide EA2.

Explain: Trichoplusia ni, High Five(baculovirus)-derived human Polypeptide GalNac Transferase 4/GALNT4 protein.

GE-1106 Polypeptide N-acetylgalactosaminyltransferase 7 (GALNT7)

L-seryl-[protein] + UDP-N-acetyl-alpha-D-galactosamine = 3-O-[N-acetyl-alpha-D-galactosaminyl]-L-seryl-[protein] + H+ + UDP

E.C.: 2.4.1.41

Package: 20 ug, 100 ug, 1 mg

Definition: Measured by its ability to transfer GalNAc from UDP-GalNAc to peptide MUC5AC-3/13 .

Explain: Trichoplusia ni, High Five(baculovirus)-derived human Polypeptide GalNac Transferase 7/GALNT7 protein.

GE-1107 Polypeptide N-acetylgalactosaminyltransferase 10 (GALNT10)

L-seryl-[protein] + UDP-N-acetyl-alpha-D-galactosamine = 3-O-[N-acetyl-alpha-D-galactosaminyl]-L-seryl-[protein] + H+ + UDP

E.C.: 2.4.1.41

Package: 20 ug, 100 ug, 1 mg

Definition: Measured by its ability to transfer GalNAc from UDP-GalNAc to peptide MUC5AC-3/13 .

Explain: Trichoplusia ni, High Five(baculovirus)-derived human Polypeptide GalNac Transferase 10/GALNT10 protein.

GE-1108 Polypeptide N-acetylgalactosaminyltransferase 11 (GALNT11)

L-seryl-[protein] + UDP-N-acetyl-alpha-D-galactosamine = 3-O-[N-acetyl-alpha-D-galactosaminyl]-L-seryl-[protein] + H+ + UDP

E.C.: 2.4.1.41

Package: 20 ug, 100 ug, 1 mg

Definition: Measured by its ability to transfer GalNAc from UDP-GalNAc to peptide EA2.

Explain: Chinese Hamster Ovary cell line, CHO-derived human Polypeptide GalNac Transferase 11/GALNT11 protein.

GALNAc transferase

GE-1109 Polypeptide N-acetylgalactosaminyltransferase 12 (GALNT12)

L-seryl-[protein] + UDP-N-acetyl-alpha-D-galactosamine = 3-O-[N-acetyl-alpha-D-galactosaminyl]-L-seryl-[protein] + H+ + UDP

E.C.: 2.4.1.41

Package: 20 ug, 100 ug, 1 mg

Definition: Measured by its ability to transfer GalNAc from UDP-GalNAc to peptide EA2.

Explain: Chinese Hamster Ovary cell line, CHO-derived human Polypeptide GalNac Transferase 12/GALNT12 protein.

GE-1110 Polypeptide N-acetylgalactosaminyltransferase 13 (GALNT13)

L-seryl-[protein] + UDP-N-acetyl-alpha-D-galactosamine = 3-O-[N-acetyl-alpha-D-galactosaminyl]-L-seryl-[protein] + H+ + UDP

E.C.: 2.4.1.41

Package: 20 ug, 100 ug, 1 mg

Definition: Measured by its ability to transfer GalNAc from UDP-GalNAc to peptide EA2.

Explain: Human embryonic kidney cell, HEK293-derived human Polypeptide GalNac Transferase 13/GALNT13 protein.

GE-1111 Polypeptide N-acetylgalactosaminyltransferase 14 (GALNT14)

L-seryl-[protein] + UDP-N-acetyl-alpha-D-galactosamine = 3-O-[N-acetyl-alpha-D-galactosaminyl]-L-seryl-[protein] + H+ + UDP

E.C.: 2.4.1.41

Package: 20 ug, 100 ug, 1 mg

Definition: Measured by its ability to transfer GalNAc from UDP-GalNAc to peptide EA2.

Explain: Chinese Hamster Ovary cell line, CHO-derived human Polypeptide GalNac Transferase 14/GALNT14 protein.

GE-1112 Polypeptide N-acetylgalactosaminyltransferase 16 (GALNTL1)

L-seryl-[protein] + UDP-N-acetyl-alpha-D-galactosamine = 3-O-[N-acetyl-alpha-D-galactosaminyl]-L-seryl-[protein] + H+ + UDP

E.C.: 2.4.1.41

Package: 20 ug, 100 ug, 1 mg

Definition: Measured by its ability to transfer GalNAc from UDP-GalNAc to peptide EA2.

Explain: Trichoplusia ni, High Five(baculovirus)-derived human GALNTL1 protein.

GlcNAc transferase

GE-1201 Alpha-1,4-N-Acetylglucosaminyltransferase 4 (A4GNT)

Catalyzes the transfer of N-acetylglucosamine (GlcNAc) to core 2 branched O-glycans

Package: 20 ug, 100 ug, 1 mg

Explain: Chinese Hamster Ovary cell line, CHO-derived human Alpha-1,4-N-Acetylglucosaminyltransferase 4/A4GNT protein.

Definition: Measured by its ability to transfer GlcNAc from UDP-GlcNAc to galactose.

GE-1202 Beta-1,3-N-Acetylglucosaminyltransferase 2 (B3GNT2)

a beta-D-galactosyl-(1->4)-N-acetyl-beta-D-glucosaminyl derivative + UDP-N-acetyl-alpha-D-glucosamine = an N-acetyl-beta-D-glucosaminyl-(1->3)-beta-D-galactosyl-(1->4)-N-acetyl-beta-D-glucosaminyl derivative + H+ + UDP

E.C.: 2.4.1.149

Package: 20 ug, 100 ug, 1 mg

Explain: Trichoplusia ni, High Five(baculovirus)-derived human Beta-1,3-N-Acetylglucosaminyltransferase 2/B3GNT2 protein.

Definition: Measured by its ability to transfer GlcNAc from UDP-GlcNAc to N-Acetyl-D-Lactosamine.

GE-1203 Beta-1,3-N-Acetylglucosaminyltransferase 4 (B3GNT4)

a beta-D-galactosyl-(1->4)-N-acetyl-beta-D-glucosaminyl derivative + UDP-N-acetyl-alpha-D-glucosamine = an N-acetyl-beta-D-glucosaminyl-(1->3)-beta-D-galactosyl-(1->4)-N-acetyl-beta-D-glucosaminyl derivative + H+ + UDP

E.C.: 2.4.1.41

Package: 20 ug, 100 ug, 1 mg

Explain: Chinese Hamster Ovary cell line, CHO-derived human Polypeptide GalNac Transferase 11/GALNT11 protein.

Definition: Measured by its ability to transfer N-acetylglucosamine from UDP-GlcNAc to beta -lactose.

GE-1204 Beta-1,3-N-Acetylglucosaminyltransferase 6 (B3GNT6)

3-O-[N-acetyl-alpha-D-galactosaminyl]-L-threonyl-[protein] + UDP-N-acetyl-alpha-D-glucosamine = 3-O-[N-acetyl-beta-D-glucosaminyl-(1->3)-N-acetyl-alpha-D-galactosaminyl]-L-threonyl-[protein] + H+ + UDP

E.C.: 2.4.1.147

Package: 20 ug, 100 ug, 1 mg

Explain: Chinese Hamster Ovary cell line, CHO-derived human Beta-1,3-N-Acetylglucosaminyltransferase 6/B3GNT6 protein.

Definition: Measured by its ability to transfer GlcNAc from UDP-GlcNAc to 4-nitrophenyl-alpha -D-galactosaminide.

GlcNAc transferase

GE-1206 Glucosaminyl (N-acetyl) Transferase 4 Core 2 (C2GNT3/GCNT4)

O3-[beta-D-galactosyl-(1->3)-N-acetyl-alpha-D-galactosaminyl]-L-seryl-[protein] + UDP-N-acetyl-alpha-D-glucosamine = 3-O-{beta-D-galactosyl-(1->3)-[N-acetyl-beta-D-glucosaminyl-(1->6)]-N-acetyl-alpha-D-galactosaminyl}-L-seryl-[protein] + H+ + UDP

E.C.: 2.4.1.102

Package: 20 ug, 100 ug, 1 mg

Explain: Chinese Hamster Ovary cell line, CHO-derived human C2GNT3/GCNT4 protein.

Definition: Measured by its ability to transfer GlcNAc from UDP-GlcNAc to B1-3 galactosyl-N-acetyl galactosamine.

GE-1207 Glucosaminyl (N-acetyl) Transferase 1 (GCNT1)

O3-[beta-D-galactosyl-(1->3)-N-acetyl-alpha-D-galactosaminyl]-L-seryl-[protein] + UDP-N-acetyl-alpha-D-glucosamine = 3-O-{beta-D-galactosyl-(1->3)-[N-acetyl-beta-D-glucosaminyl-(1->6)]-N-acetyl-alpha-D-galactosaminyl}-L-seryl-[protein] + H+ + UDP

E.C.: 2.4.1.102

Package: 20 ug, 100 ug, 1 mg

Explain: Trichoplusia ni, High Five(baculovirus)-derived human Glucosaminyl (N-acetyl) Transferase 1/GCNT1 protein.

Definition: Measured by its ability to transfer GlcNAc from UDP-GlcNAc to B1-3 galactosyl-N-acetyl galactosamine.

GE-1208 Glucosaminyl (N-acetyl) Transferase 2 (GCNT2)

a beta-D-Gal-(1->4)-beta-D-GlcNAc-(1->3)-beta-D-Gal-(1->4)-beta-D-GlcNAc derivative + UDP-N-acetyl-alpha-D-glucosamine = a beta-D-Gal-(1->4)-beta-D-GlcNAc-(1->3)-[beta-D-GlcNAc-(1->6)]-beta-D-Gal-(1->4)-N-acetyl-beta-D-glucosaminyl derivative + H+ + UDP

E.C.: 2.4.1.150

Package: 20 ug, 100 ug, 1 mg

Explain: Chinese Hamster Ovary cell line, CHO-derived human Glucosaminyl (N-acetyl) Transferase 2/GCNT2 protein.

Definition: Measured by its ability to transfer GlcNAc from UDP-GlcNAc to Cy5-labeled Extended G2.

GE-1209 N-Acetylglucosaminyltransferase1 (MGAT1)

N4-(alpha-D-Man-(1->3)-[alpha-D-Man-(1->3)-[alpha-D-Man-(1->6)]-alpha-D-Man-(1->6)]-beta-D-Man-(1->4)-beta-D-GlcNAc-(1->4)-beta-D-GlcNAc)-L-asparaginyl-[protein] (N-glucan mannose isomer 5A1,2) + UDP-N-acetyl-alpha-D-glucosamine = H+ + N4-{beta-D-GlcNAc-(1->2)-alpha-D-Man-(1->3)-[alpha-D-Man-(1->3)-[alpha-D-Man-(1->6)]-alpha-D-Man-(1->6)]-beta-D-Man-(1->4)-beta-D-GlcNAc-(1->4)-beta-D-GlcNAc}-L-asparaginyl-[protein] + UDP

E.C.: 2.4.1.101

Package: 20 ug, 100 ug, 1 mg

Explain: Trichoplusia ni, High Five(baculovirus)-derived human N-Acetylglucosaminyltransferase I/MGAT1 protein.

Definition: Measured by its ability to transfer N-Acetyl-D-Glucosamine from UDP-GlcNAc to alpha 1-3, alpha 1-6-Mannotriose.

GlcNAc transferase

GE-1210 N-Acetylglucosaminyltransferase 2 (MGAT2)

N4-{beta-D-GlcNAc-(1->2)-alpha-D-Man-(1->3)-[alpha-D-Man-(1->6)]-beta-D-Man-(1->4)-beta-D-GlcNAc-(1->4)-beta-D-GlcNAc}-L-asparaginyl-[protein] + UDP-N-acetyl-alpha-D-glucosamine = H+ + N4-{beta-D-GlcNAc-(1->2)-alpha-D-Man-(1->3)-[beta-D-GlcNAc-(1->2)-alpha-D-Man-(1->6)]-beta-D-Man-(1->4)-beta-D-GlcNAc-(1->4)-beta-D-GlcNAc}-L-asparaginyl-[protein] + UDP

E.C.: 2.4.1.143

Package: 20 ug, 100 ug, 1 mg

Explain: Human embryonic kidney cell, HEK293-derived human N-Acetylglucosaminyltransferase 2/MGAT2 protein.

Definition: Measured by its ability to modify the glycan Cy5-labeled M1N1f and thereby creating a band shift.

GE-1211 N-Acetylglucosaminyltransferase III (MGAT3)

N4-{beta-D-GlcNAc-(1->2)-alpha-D-Man-(1->3)-[beta-D-GlcNAc-(1->2)-alpha-D-Man-(1->6)]-beta-D-Man-(1->4)-beta-D-GlcNAc-(1->4)-beta-D-GlcNAc}-L-asparaginyl-[protein] + UDP-N-acetyl-alpha-D-glucosamine = H + N4-{beta-D-GlcNAc-(1->2)-alpha-D-Man-(1->3)-[beta-D-GlcNAc-(1->4)]-[beta-D-GlcNAc-(1->2)-alpha-D-Man-(1->6)]-beta-D-Man-(1->4)-beta-D-GlcNAc-(1->4)-beta-D-GlcNAc}-L-asparaginyl-[protein] + UDP

E.C.: 2.4.1.144

Package: 20 ug, 100 ug, 1 mg

Explain: Chinese Hamster Ovary cell line, CHO-derived human N-Acetylglucosaminyltransferase III/MGAT3 protein.

Definition: Measured by its ability to transfer N-Acetyl-alpha -D-glucosamine from UDP-N-Acetyl-alpha -D-glucosamine to a biantennary N-linked core pentasaccharide in a CD39L3 coupled assay.

GE-1212 N-Acetylglucosaminyltransferase V (MGAT5)

N4-{beta-D-GlcNAc-(1->2)-[beta-D-GlcNAc-(1->4)]-alpha-D-Man-(1->3)-[beta-D-GlcNAc-(1->2)-alpha-D-Man-(1->6)]-beta-D-Man-(1->4)-beta-D-GlcNAc-(1->4)-beta-D-GlcNAc}-L-asparaginyl-[protein] + UDP-N-acetyl-alpha-D-glucosamine = H+ + N4-{beta-D-GlcNAc-(1->2)-[beta-D-GlcNAc-(1->4)]-alpha-D-Man-(1->3)-[beta-D-GlcNAc-(1->2)-[beta-D-GlcNAc-(1->6)]-alpha-D-Man-(1->6)]-beta-D-Man-(1->4)-beta-D-GlcNAc-(1->4)-beta-D-GlcNAc}-L-asparaginyl-[protein] + UDP

E.C.: 2.4.1.155

Package: 20 ug, 100 ug, 1 mg

Explain: Trichoplusia ni, High Five(baculovirus)-derived human N-Acetylglucosaminyltransferase V/MGAT5 protein.

Definition: Measured by its ability to transfer N-Acetyl-alpha -D-glucosamine from UDP-N-Acetyl-alpha -D-glucosamine to a biantennary N-linked core pentasaccharide in a CD39L3 coupled assay.

Sialyltransferases

GE-1301 ST3 beta-Gal alpha-2,3-Sialyltransferase 1 (ST3GAL1)

a beta-D-galactosyl-(1->3)-N-acetyl-alpha-D-galactosaminyl derivative + CMP-N-acetyl-beta-neuraminate = an N-acetyl-alpha-neuraminyl-(2->3)-beta-D-galactosyl-(1->3)-N-acetyl-alpha-D-galactosaminyl derivative + CMP + H^+

E.C.: 2.4.3.4

Package: 20 ug, 100 ug, 1 mg

Explain: Trichoplusia ni, High Five(baculovirus)-derived human ST3 beta-Gal alpha-2,3-Sialyltransferase 1/ST3GAL1 protein.

Definition: Measured by its ability to transfer Neu5Ac from CMP-Neu5Ac to bovine B1-3 galactosyl-N-acetyl galactosamine.

GE-1302 ST3 beta-Gal alpha-2,3-Sialyltransferase 2 (ST3GAL2)

a beta-D-galactosyl-(1->3)-N-acetyl-alpha-D-galactosaminyl derivative + CMP-N-acetyl-beta-neuraminate = an N-acetyl-alpha-neuraminyl-(2->3)-beta-D-galactosyl-(1->3)-N-acetyl-alpha-D-galactosaminyl derivative + CMP + H^+

E.C.: 2.4.3.4

Package: 20 ug, 100 ug, 1 mg

Explain: Chinese Hamster Ovary cell line, CHO-derived human ST3 beta-Gal alpha-2,3-Sialyltransferase 2/ST3GAL2 protein.

Definition: Measured by its ability to transfer Neu5Ac from CMP-Neu5Ac to bovine B1-3 galactosyl-N-acetyl galactosamine.

GE-1303 ST3 beta-Gal alpha-2,3-Sialyltransferase 3 (ST3GAL3)

a beta-D-galactosyl-(1->4)-N-acetyl-beta-D-glucosaminyl derivative + CMP-N-acetyl-beta-neuraminate = an N-acetyl-alpha-neuraminyl-(2->3)-beta-D-galactosyl-(1->4)-N-acetyl-beta-D-glucosaminyl derivative + CMP + H+

E.C.: 2.4.3.6

Package: 20 ug, 100 ug, 1 mg

Explain: Trichoplusia ni, High Five(baculovirus)-derived human ST3GAL3 protein.

Define: Measured by its ability to transfer Neu5Ac from CMP-Neu5Ac to N-Acetyllactosamine.

GE-1304 ST3 beta-Gal alpha-2,3-Sialyltransferase 4 (ST3GAL4)

a beta-D-galactosyl-(1->3)-N-acetyl-beta-D-galactosaminyl derivative + CMP-N-acetyl-beta-neuraminate = an N-acetyl-alpha-neuraminyl-(2->3)-beta-D-galactosyl-(1->3)-N-acetyl-beta-D-galactosaminyl derivative + CMP + H^+

E.C.: 2.4.3.2

Package: 20 ug, 100 ug, 1 mg

Explain: Trichoplusia ni, High Five(baculovirus)-derived human ST3GAL4 protein.

Definition: Measured by its ability to transfer Neu5Ac from CMP-Neu5Ac to alpha -lactose.

GE-1305 ST3 beta-Gal alpha-2,3-Sialyltransferase 5 (ST3GAL5/GM3 Synthase （Mouse）)

a beta-D-Gal-(1->4)-beta-D-Glc-(1<->1)-Cer(d18:1(4E)) + CMP-N-acetyl-beta-neuraminate = CMP + ganglioside GM3 (d18:1(4E)) + H+

E.C.: 2.4.3.9

Package: 20 ug, 100 ug, 1 mg

Explain: Chinese Hamster Ovary cell line, CHO-derived mouse ST3GAL5/GM3 Synthase protein.

Definition: Measured by its ability to transfer Neu5Ac from CMP-Neu5Ac to alpha -lactose.

GE-1306 ST3 beta-Gal alpha-2,3-Sialyltransferase 6 (ST3GAL6)

Involved in the synthesis of sialyl-paragloboside, a precursor of sialyl-Lewis X determinant. Has a alpha-2,3-sialyltransferase activity toward Gal-beta1,4-GlcNAc structure on glycoproteins and glycolipids. Has a restricted substrate specificity, it utilizes Gal-beta1,4-GlcNAc on glycoproteins, and neolactotetraosylceramide and neolactohexaosylceramide, but not lactotetraosylceramide, lactosylceramide or asialo-GM1.

E.C.: 2.4.99.

Package: 20 ug, 100 ug, 1 mg

Explain: Chinese Hamster Ovary cell line, CHO-derived human ST3GAL6 protein.

Definition: Measured by its ability to transfer Neu5Ac from CMP-Neu5Ac to N-Acetyllactosamine.

GE-1307 ST6 Gal Sialyltransferase 1 (ST6GAL1)

a beta-D-galactoside + CMP-N-acetyl-beta-neuraminate = an N-acetyl-alpha-neuraminyl-(2->6)-beta-D-galactosyl derivative + CMP + H+

E.C.: 2.4.3.1

Package: 20 ug, 100 ug, 1 mg

Explain: Trichoplusia ni, High Five(baculovirus)-derived human ST6 Gal Sialyltransferase 1/ST6GAL1 protein.

Definition: Measured by its ability to transfer Neu5Ac from CMP-Neu5Ac to N-Acetyllactosamine.

GE-1308 ST6 Gal Sialyltransferase 2 (ST6GAL2)

a beta-D-galactoside + CMP-N-acetyl-beta-neuraminate = an N-acetyl-alpha-neuraminyl-(2->6)-beta-D-galactosyl derivative + CMP + H+

E.C.: 2.4.3.1

Package: 20 ug, 100 ug, 1 mg

Explain: Chinese Hamster Ovary cell line, CHO-derived human ST6 Gal Sialyltransferase 2/ST6GAL2 protein.

Definition: Measured by its ability to transfer Neu5Ac from CMP-Neu5Ac to fetuin of fetal calf serum.

GE-1309 ST6 Sialyltransferase 1 (ST6GALNAC1)

a beta-D-galactosyl-(1->3)-N-acetyl-alpha-D-galactosaminyl derivative + CMP-N-acetyl-beta-neuraminate = a beta-D-galactosyl-(1->3)-[N-acetyl-alpha-neuraminyl-(2->6)]-N-acetyl-alpha-D-galactosaminyl derivative + CMP + H+

E.C.: 2.4.3.3

Package: 20 ug, 100 ug, 1 mg

Explain: Human embryonic kidney cell, HEK293-derived human ST6 Sialyltransferase 1/ST6GALNAC1 protein.

Definition: Measured by its ability to transfer Neu5Ac from CMP-Neu5Ac to fetuin of fetal calf serum.

GE-1310 ST6 Sialyltransferase 2 (ST6GALNAC2)

a beta-D-galactosyl-(1->3)-N-acetyl-alpha-D-galactosaminyl derivative + CMP-N-acetyl-beta-neuraminate = a beta-D-galactosyl-(1->3)-[N-acetyl-alpha-neuraminyl-(2->6)]-N-acetyl-alpha-D-galactosaminyl derivative + CMP + H+

E.C.: 2.4.3.3

Package: 20 ug, 100 ug, 1 mg

Explain: Trichoplusia ni, High Five(baculovirus)-derived mouse ST6 Sialyltransferase 2/ST6GALNAC2 protein.

Definition: Measured by its ability to transfer Neu5Ac from CMP-Neu5Ac to fetuin of fetal calf serum.

GE-1311 ST6 Sialyltransferase 4 (ST6GALNAC4)

an alpha-Neu5Ac-(2->3)-beta-D-Gal-(1->3)-D-GlcNAc derivative + CMP-N-acetyl-beta-neuraminate = an alpha-Neu5Ac-(2->3)-beta-D-Gal-(1->3)-[alpha-Neu5Ac-(2->6)]-D-GlcNAc-R + CMP + H+

E.C.: 2.4.3.7

Package: 20 ug, 100 ug, 1 mg

Explain: Trichoplusia ni, High Five(baculovirus)-derived human ST6GALNAC4 protein.

Definition: Measured by its ability to transfer Neu5Ac from CMP-Neu5Ac to fetuin of fetal calf serum.

GE-1312 ST6 Sialyltransferase 5 (ST6GALNAC5)

CMP-N-acetyl-beta-neuraminate + ganglioside GM1b (d18:1(4E)) = a ganglioside GD1alpha (d18:1(4E)) + CMP + H+

E.C.: N/A

Package: 20 ug, 100 ug, 1 mg

Explain: Chinese Hamster Ovary cell line, CHO-derived human ST6 GalNAc alpha-2,6-sialyltransferaseV/ST6GALNAC5 protein.

Definition: Measured by its ability to transfer Neu5Ac from CMP-Neu5Ac to fetuin of fetal calf serum.

Sialyltransferases

GE-1313 ST6 Sialyltransferase 6 (ST6GALNAC6)

CMP-N-acetyl-beta-neuraminate + ganglioside GM1b (d18:1(4E)) = a ganglioside GD1alpha (d18:1(4E)) + CMP + H^+

Package: 20 ug, 100 ug, 1 mg

Explain: Chinese Hamster Ovary cell line, CHO-derived human ST6 Sialyltransferase 6/ST6GALNAC6 protein.

Definition: Measured by its ability to transfer Neu5Ac from CMP-Neu5Ac to fetuin of fetal calf serum.

GE-1314 ST8 alpha-2,8-Sialyltransferase 8A (ST8SIA1)

an N-acetyl-alpha-neuraminyl-(2->3)-beta-D-galactosyl derivative + CMP-N-acetyl-beta-neuraminate = an N-acetyl-alpha-neuraminyl-(2->8)-N-acetyl-alpha-neuraminyl-(2->3)-beta-D-galactosyl derivative + CMP + H^+

E.C.: 2.4.3.8

Package: 20 ug, 100 ug, 1 mg

Explain: Chinese Hamster Ovary cell line, CHO-derived human ST8 alpha-2,8-Sialyltransferase 8A/ST8SIA1 protein.

Definition: Measured by its ability to transfer Neu5Ac from CMP-Neu5Ac to fetuin of fetal calf serum.

GE-1315 ST8 alpha-2,8-Sialyltransferase 8B (ST8SIA2)

May transfer sialic acid through alpha-2,8-linkages to the alpha-2,3-linked and alpha-2,6-linked sialic acid of N-linked oligosaccharides of glycoproteins and may be involved in PSA (polysialic acid) expression.

Package: 20 ug, 100 ug, 1 mg

Explain: Trichoplusia ni, High Five(baculovirus)-derived human ST8 alpha-2,8-Sialyltransferase 8B/ST8SIA2 protein.

Definition: Measured by its ability to transfer sialic acid from CMP-NeuAc to Recombinant Human NCAM-1/CD56 120 isoform.

GE-1316 ST8 alpha-2,8-Sialyltransferase 4 (ST8SIA4)

Catalyzes the polycondensation of alpha-2,8-linked sialic acid required for the synthesis of polysialic acid (PSA), which is present on the embryonic neural cell adhesion molecule (N-CAM), necessary for plasticity of neural cells.

E.C.: 2.4.99.-

Package: 20 ug, 100 ug, 1 mg

Explain: Chinese Hamster Ovary cell line, CHO-derived human ST8 alpha-2,8-Sialyltransferase 4/ST8SIA4 protein.

Definition: Measured by its ability to transfer sialic acid from CMP-NeuAc to Recombinant Human NCAM-1/CD56 120 isoform.

Sialyltransferases

GE-1317 ST8 alpha-2,8-Sialyltransferase 6 (ST8SIA6)

CMP-N-acetyl-beta-neuraminate + ganglioside GM3 = CMP + ganglioside GD3 + H^+

E.C.: 2.4.99.-

Package: 20 ug, 100 ug, 1 mg

Explain: Chinese Hamster Ovary cell line, CHO-derived human ST8 alpha-2,8-Sialyltransferase 6/ST8SIA6 protein.

Definition: Measured by its ability to transfer Neu5Ac from CMP-Neu5Ac to fetuin of fetal calf serum.

Fucosyltransferases

GE-1401 Fucosyltransferase 2 (FUT2)

a beta-D-galactosyl-(1->3)-N-acetyl-beta-D-glucosaminyl derivative + GDP-beta-L-fucose = an alpha-L-Fuc-(1->2)-beta-D-Gal-(1->3)-beta-D-GlcNAc derivative + GDP + H^+

E.C.: 2.4.1.69

Package: 20 ug, 100 ug, 1 mg

Explain: Human embryonic kidney cell, HEK293-derived human Fucosyltransferase 2/FUT2 protein.

Definition: Measured by its ability to transfer fucose from GDP-fucose to lactose.

GE-1402 Fucosyltransferase 3 (FUT3)

a beta-D-galactosyl-(1->3)-N-acetyl-beta-D-glucosaminyl derivative + GDP-beta-L-fucose = a beta-D-galactosyl-(1->3)-[alpha-L-fucosyl-(1->4)]-N-acetyl-beta-D-glucosaminyl derivative + GDP + H^+

E.C.: 2.4.1.65

Package: 20 ug, 100 ug, 1 mg

Explain: Trichoplusia ni, High Five(baculovirus)-derived human Fucosyltransferase 3/FUT3 protein. Arg35-Thr361, with an N-terminal 6-His tag.

Definition: Measured by its ability to transfer fucose from GDP-fucose to N-Acetyllactosamine.

GE-1403 Fucosyltransferase 5 (FUT5)

a beta-D-galactosyl-(1->3)-N-acetyl-beta-D-glucosaminyl derivative +GDP-beta-L-fucose = a beta-D-galactosyl-(1->3)-[alpha-L-fucosyl-(1->4)]-N-acetyl-beta-D-glucosaminyl derivative + GDP + H^+

E.C.: 2.4.1.65

Package: 20 ug, 100 ug, 1 mg

Explain: Trichoplusia ni, High Five(baculovirus)-derived human Fucosyltransferase 5/FUT5 protein.

Definition: Measured by its ability to transfer fucose from GDP-fucose to N-Acetyllactosamine.

GE-1404 Fucosyltransferase 6 (FUT6)

E.C.: 2.4.1.152

Package: 20 ug, 100 ug, 1 mg

Explain: Chinese Hamster Ovary cell line, CHO-derived human ST8 alpha-2,8-Sialyltransferase 8A/ST8SIA1 protein.

Definition: Measured by its ability to transfer fucose from GDP-fucose to fetal bovine fetuin.

GE-1405 Fucosyltransferase 7 (FUT7)

an N-acetyl-alpha-neuraminyl-(2->3)-beta-D-galactosyl-(1->4)-N-acetyl-beta-D-glucosaminyl derivative + GDP-beta-L-fucose = an alpha-Neu5Ac-(2->3)-beta-D-Gal-(1->4)-[alpha-L-Fuc-(1->3)]-beta-D-GlcNAc derivative + GDP + H^+

E.C.: 2.4.1.-

Package: 20 ug, 100 ug, 1 mg

Explain: Chinese Hamster Ovary cell line, CHO-derived human Fucosyltransferase 7/FUT7 protein.

Definition: Measured by its ability to transfer fucose from GDP-fucose to fetal bovine fetuin.

GE-1406 SFucosyltransferase 8 (FUT8)

GDP-beta-L-fucose + N4-{beta-D-GlcNAc-(1->2)-alpha-D-Man-(1->3)-[beta-D-GlcNAc-(1->2)-alpha-D-Man-(1->6)]-beta-D-Man-(1->4)-beta-D-GlcNAc-(1->4)-beta-D-GlcNAc}-L-asparaginyl-[protein] = GDP + H+ + N4-{beta-D-GlcNAc-(1->2)-alpha-D-Man-(1->3)-[beta-D-GlcNAc-(1->2)-alpha-D-Man-(1->6)]-beta-D-Man-(1->4)-beta-D-GlcNAc-(1->4)-[alpha-L-Fuc-(1->6)]-beta-D-GlcNAc}-L-asparaginyl-[protein]

E.C.: 2.4.1.68

Package: 20 ug, 100 ug, 1 mg

Explain: Chinese Hamster Ovary cell line, CHO-derived human Fucosyltransferase 8/FUT8 protein.

Definition: Measured by its ability to transfer fucose from GDP-fucose to N-Acetyllactosamine.

GE-1407 Fucosyltransferase 9 (FUT9)

a beta-D-galactosyl-(1->4)-N-acetyl-beta-D-glucosaminyl derivative + GDP-beta-L-fucose = a beta-D-galactosyl-(1->4)-[alpha-L-fucosyl-(1->3)]-N-acetyl-beta-D-glucosaminyl derivative + GDP + H^+

E.C.: 2.4.1.152

Package: 20 ug, 100 ug, 1 mg

Explain: Chinese Hamster Ovary cell line, CHO-derived human Fucosyltransferase 9/FUT9 protein.

Definition: Measured by its ability to transfer fucose from GDP-fucose to N-Acetyllactosamine.

GE-1408 Fucosyltransferase 11 (FUT11)

Has fucosyltransferase activity toward biantennary N-glycan acceptors. Does not fucosylate GlcNAc residue within type 2 lactosamine unit.

E.C.: 2.4.1.-

Package: 20 ug, 100 ug, 1 mg

Explain: Chinese Hamster Ovary cell line, CHO-derived human Fucosyltransferase 11/FUT11 protein.

Definition: Measured by its ability to transfer fucose from GDP-fucose to N-Acetyllactosamine.

GE-1409 Protein O-Fucosyltransferase 1 (POFUT1)

GDP-beta-L-fucose + L-seryl-[protein] = 3-O-(alpha-L-fucosyl)-L-seryl-[protein] + GDP + H^+

E.C.: 2.4.1.221

Package: 20 ug, 100 ug, 1 mg

Explain: Trichoplusia ni, High Five(baculovirus)-derived human Protein O-Fucosyltransferase 1/POFUT1 protein.

Definition: Measured by its ability to hydrolyze the donor substrate GDP-fucose.

GE-1501 Carbohydrate Sulfotransferase 1 (CHST1)

3'-phosphoadenylyl sulfate + keratan = adenosine 3',5'-bisphosphate + keratan 6'-sulfate.

E.C.: 2.8.2.21

Package: 20 ug, 100 ug, 1 mg

Explain: Chinese Hamster Ovary cell line, CHO-derived human Carbohydrate Sulfotransferase 1/CHST1 protein.

Definition: Measured by its ability to transfer sulfate from PAPS to alpha -Lactose under the described conditions.

GE-1502 Carbohydrate Sulfotransferase 2 (CHST2)

3'-phosphoadenylyl sulfate + 3-O-{N-acetyl-beta-D-glucosaminyl-(1->3)-beta-D-galactosyl-(1->3)-N-acetyl-alpha-D-galactosaminyl}-L-threonyl-[protein] = 3-O-{6-O-sulfo-N-acetyl-beta-D-glucosaminyl-(1->3)-beta-D-galactosyl-(1->3)-N-acetyl-alpha-D-galactosaminyl}-L-threonyl-[protein] + adenosine 3',5'-bisphosphate + H^+

E.C.: 2.8.2.-

Package: 20 ug, 100 ug, 1 mg

Explain: Chinese Hamster Ovary cell line, CHO-derived human Carbohydrate Sulfotransferase 2/CHST2 protein.

Definition: Measured by its ability to transfer fucose from GDP-fucose to fetal bovine fetuin.

GE-1503 Carbohydrate Sulfotransferase 3 (CHST3)

n 3'-phosphoadenylyl sulfate + chondroitin beta-D-glucuronate = n adenosine 3',5'-bisphosphate + chondroitin 6'-sulfate + 2 H^+

E.C.: 2.8.2.17

Package: 20 ug, 100 ug, 1 mg

Explain: Chinese Hamster Ovary cell line, CHO-derived human Carbohydrate Sulfotransferase 3/CHST3 protein.

Definition: Measured by its ability to transfer sulfate from PAPS to chondroitin sulfate under the described conditions.

GE-1504 Carbohydrate Sulfotransferase 4 (CHST4)

3'-phosphoadenylyl sulfate + 3-O-{N-acetyl-beta-D-glucosaminyl-(1->3)-beta-D-galactosyl-(1->3)-N-acetyl-alpha-D-galactosaminyl}-L-threonyl-[protein] = 3-O-{6-O-sulfo-N-acetyl-beta-D-glucosaminyl-(1->3)-beta-D-galactosyl-(1->3)-N-acetyl-alpha-D-galactosaminyl}-L-threonyl-[protein] + adenosine 3',5'-bisphosphate + H^+

E.C.: 2.8.2.-

Package: 20 ug, 100 ug, 1 mg

Explain: Chinese Hamster Ovary cell line, CHO-derived human Carbohydrate Sulfotransferase 4/CHST4 protein.

Definition: Measured by its ability to transfer sulfate from PAPS to N-acetyl-D-glucosamine under the described conditions.

Carbohydrate Sulfotransferases

GE-1505 Carbohydrate Sulfotransferase 5 (CHST5)

Sulfotransferase that utilizes 3'-phospho-5'-adenylyl sulfate (PAPS) as sulfonate donor to catalyze the transfer of sulfate to position 6 of non-reducing N-acetylglucosamine (GlcNAc) residues and O-linked sugars of mucin-type acceptors.

E.C.: 2.8.2.-

Package: 20 ug, 100 ug, 1 mg

Explain: Chinese Hamster Ovary cell line, CHO-derived mouse Carbohydrate Sulfotransferase 5/CHST5 protein.

Definition: Measured by its ability to transfer sulfate from PAPS to N-acetyl-D-glucosamine under the described conditions.

GE-1506 Carbohydrate Sulfotransferase 6 (CHST6)

3'-phosphoadenylyl sulfate + keratan = adenosine 3',5'-bisphosphate + keratan 6'-sulfate.

E.C.: 2.8.2.21

Package: 20 ug, 100 ug, 1 mg

Explain: Chinese Hamster Ovary cell line, CHO-derived human Carbohydrate Sulfotransferase 6/CHST6 protein.

Definition: Measured by its ability to transfer sulfate from PAPS to N-acetyl-D-glucosamine under the described conditions.

GE-1507 Carbohydrate Sulfotransferase 7 (CHST7)

n 3'-phosphoadenylyl sulfate + chondroitin beta-D-glucuronate = n adenosine 3',5'-bisphosphate + chondroitin 6'-sulfate + 2 H^+

E.C.: 2.8.2.17

Package: 20 ug, 100 ug, 1 mg

Explain: Chinese Hamster Ovary cell line, CHO-derived mouse Carbohydrate Sulfotransferase 7/CHST7 protein.

Definition: Measured by its ability to transfer sulfate from PAPS to N-acetyl-D-glucosamine under the described conditions.

GE-1508 Carbohydrate Sulfotransferase 10 (CHST10)

3'-phosphoadenylyl sulfate + 3-O-{beta-D-GlcA-(1->[3)-alpha-D-Xyl-(1->3)-beta-D-GlcA-(1->](n)-4)-beta-D-Xyl-(1->4)-Rib-ol-P-Rib-ol-P-3-beta-D-GalNAc-(1->3)-beta-D-GlcNAc-(1->4)-O-6-P-alpha-D-Man}-L-Thr-[protein] = 3-O-{O-3-S-beta-D-GlcA-(1->[3)-alpha-D-Xyl-(1->3)-beta-D-GlcA-(1->](n)-4)-beta-D-Xyl-(1->4)-Rib-ol-P-Rib-ol-P-3-beta-D-GalNAc-(1->3)-beta-D-GlcNAc-(1->4)-O-6-P-alpha-D-Man}-L-Thr-[protein] + adenosine 3',5'-bisphosphate + H^+

E.C.: 2.8.2.-

Package: 20 ug, 100 ug, 1 mg

Explain: Chinese Hamster Ovary cell line, CHO-derived human Carbohydrate Sulfotransferase 10/CHST10 protein.

Definition: Measured by its ability to transfer sulfate from PAPS to phenolpthalein glucuronic acid under the described conditions.

GE-1509 Carbohydrate Sulfotransferase 15 (CHST15)

n 3'-phosphoadenylyl sulfate + dermatan 4'-sulfate = n adenosine 3',5'-bisphosphate + dermatan 4',6'-bissulfate + n H^+

E.C.: 2.8.2.33

Package: 20 ug, 100 ug, 1 mg

Explain: Trichoplusia ni, High Five(baculovirus)-derived human Carbohydrate Sulfotransferase 15/CHST15 protein.

Definition: Measured by its ability to transfer sulfate from PAPS to chondroitin sulfate under the described conditions.

GE-1510 Galactose-3-O-sulfotransferase 2 (GAL3ST2)

Catalyzes the transfer of sulfate to the C2-position of selected hexuronic acid residues within the maturing heparan sulfate (HS)

E.C.: 2.8.2.-

Package: 20 ug, 100 ug, 1 mg

Explain: Chinese Hamster Ovary cell line, CHO-derived human Galactose-3-O-sulfotransferase 2/GAL3ST2 protein.

Definition: Measured by its ability to transfer sulfate from PAPS to heparan sulfate under the described conditions.

GE-1511 Heparan Sulfate 2-O-Sulfotransferase 1 (HS2ST1)

n 3'-phosphoadenylyl sulfate + chondroitin beta-D-glucuronate = n adenosine 3',5'-bisphosphate + chondroitin 6'-sulfate + 2 H^+

E.C.: 2.8.2.17

Package: 20 ug, 100 ug, 1 mg

Explain: Chinese Hamster Ovary cell line, CHO-derived human Heparan Sulfate 2-O-Sulfotransferase 1/HS2ST1 protein.

Definition: Measured by its ability to transfer sulfate from PAPS to chondroitin sulfate under the described conditions.

GE-1512 Heparan Sulfate 3-O-Sulfotransferase 1 (HS3ST1)

3'-phosphoadenylyl sulfate + alpha-D-glucosaminyl-[heparan sulfate](n) = 3-sulfo-alpha-D-glucosaminyl-[heparan sulfate](n) + adenosine 3',5'-bisphosphate + H^+

E.C.: 2.8.2.23

Package: 20 ug, 100 ug, 1 mg

Explain: Chinese Hamster Ovary cell line, CHO-derived human Heparan Sulfate 3-O-Sulfotransferase 1/HS3ST1 protein.

Definition: Measured by its ability to transfer sulfate from PAPS to heparan sulfate. The specific activity is >30 pmol/min/μg, as measured under the described conditions.

GE-1513 Heparan Sulfate 3-O-Sulfotransferase 4 (HS3ST4)

3'-phosphoadenylyl sulfate + alpha-D-glucosaminyl-[heparan sulfate](n) = 3-sulfo-alpha-D-glucosaminyl-[heparan sulfate](n) + adenosine 3',5'-bisphosphate + H^+

E.C.: 2.8.2.23

Package: 20 ug, 100 ug, 1 mg

Explain: Chinese Hamster Ovary cell line, CHO-derived human Heparan Sulfate 3-O-Sulfotransferase 4/HS3ST4 protein.

Definition: Measured by its ability to transfer sulfate from PAPS to heparan sulfate under the described conditions.

GE-1514 Heparan Sulfate 6-O-Sulfotransferase 1 (HS6ST1)

3'-phosphoadenylyl sulfate + alpha-D-glucosaminyl-[heparan sulfate](n) = 6-sulfo-alpha-D-glucosaminyl-[heparan sulfate](n) + adenosine 3',5'-bisphosphate + H^+

E.C.: 2.8.2.-

Package: 20 ug, 100 ug, 1 mg

Explain: Chinese Hamster Ovary cell line, CHO-derived human Heparan Sulfate 6-O-Sulfotransferase 1/HS6ST1 protein.

Definition: Measured by its ability to transfer sulfate from PAPS to heparan sulfate under the described conditions.

GE-1515 Heparan Sulfate 6-O-Sulfotransferase 3 (HS6ST3)

3'-phosphoadenylyl sulfate + alpha-D-glucosaminyl-[heparan sulfate](n) = 6-sulfo-alpha-D-glucosaminyl-[heparan sulfate](n) + adenosine 3',5'-bisphosphate + H^+

E.C.: 2.8.2.-

Package: 20 ug, 100 ug, 1 mg

Explain: Chinese Hamster Ovary cell line, CHO-derived human Heparan Sulfate 6-O-Sulfotransferase 3/HS6ST3 protein.

Definition: Measured by its ability to transfer sulfate from PAPS to heparan sulfate under the described conditions.

GE-1516 Heparan Sulfate Glucosamine 3-O-Sulfotransferase 3 (HS3ST3B1)

3'-phosphoadenylyl sulfate + alpha-D-glucosaminyl-[heparan sulfate](n) = 3-sulfo-alpha-D-glucosaminyl-[heparan sulfate](n) + adenosine 3',5'-bisphosphate + H^+

E.C.: 2.8.2.30

Package: 20 ug, 100 ug, 1 mg

Explain: Chinese Hamster Ovary cell line, CHO-derived human Heparan Sulfate Glucosamine 3-O-Sulfotransferase 3 protein.

Definition: Measured by its ability to transfer sulfate from PAPS to heparan sulfate under the described conditions.

Carbohydrate Sulfotransferases

GE-1517 N-Deacetylase/N-Sulfotransferase 1 (NDST1)

3'-phosphoadenylyl sulfate + alpha-D-glucosaminyl-[heparan sulfate](n) = adenosine 3',5'-bisphosphate + 2 H^+ + N-sulfo-alpha-D-glucosaminyl-[heparan sulfate](n)

E.C.: 2.8.2.8

Package: 20 ug, 100 ug, 1 mg

Explain: Chinese Hamster Ovary cell line, CHO-derived human N-Deacetylase/N-Sulfotransferase 1/NDST1 protein.

Definition: Measured by its ability to transfer sulfate from PAPS to heparan sulfate under the described conditions.

GE-1518 N-Deacetylase/N-Sulfotransferase 2 (NDST2)

3'-phosphoadenylyl sulfate + alpha-D-glucosaminyl-[heparan sulfate](n) = adenosine 3',5'-bisphosphate + 2 H^+ + N-sulfo-alpha-D-glucosaminyl-[heparan sulfate](n)

E.C.: 2.8.2.8

Package: 20 ug, 100 ug, 1 mg

Explain: Chinese Hamster Ovary cell line, CHO-derived human Galactose-3-O-sulfotransferase 2/GAL3ST2 protein.

Definition: Measured by its ability to transfer sulfate from PAPS to heparan sulfate under the described conditions.

Glucuronosyltransferases

GE-1601 Protein O-Glucosyltransferase 1 (POGLUT1)

L-seryl-[EGF-like domain protein] + UDP-alpha-D-xylose = 3-O-(beta-D-xylosyl)-L-seryl-[EGF-like domain protein] + H^+ + UDP

E.C.: 2.4.2.63

Package: 20 ug, 100 ug, 1 mg

Explain: Chinese Hamster Ovary cell line, CHO-derived human Protein O-Glucosyltransferase 1/POGLUT1 protein.

Definition: Measured by its ability to hydrolyze UDP-Glucose.

Glucuronosyltransferases

GE-1602 beta-1,3-Glucuronyltransferase 1 (B3GAT1)

3-O-(beta-D-galactosyl-(1->3)-beta-D-galactosyl-(1->4)-beta-D-xylosyl)-L-seryl-[protein] + UDP-alpha-D-glucuronate = 3-O-(beta-D-GlcA-(1->3)-beta-D-Gal-(1->3)-beta-D-Gal-(1->4)-beta-D-Xyl)-L-seryl-[protein] + H+ + UDP

E.C.: 2.4.1.135

Package: 20 ug, 100 ug, 1 mg

Explain: Chinese Hamster Ovary cell line, CHO-derived human beta-1,3-Glucuronyltransferase 1/B3GAT1 protein.

Definition: Measured by its ability to transfer GlcA from UDP-GlcA to lactose.

GE-1603 beta-1,4-Glucuronyltransferase 1 (B4GAT1)

3-O-[beta-D-Xyl-(1->4)-Rib-ol-P-Rib-ol-P-3-beta-D-GalNAc-(1->3)-beta-D-GlcNAc-(1->4)-(O-6-P-alpha-D-Man)]-Thr-[protein] + UDP-alpha-D-glucuronate = 3-O-[beta-D-GlcA-(1->3)-beta-D-Xyl-(1->4)-Rib-ol-P-Rib-ol-P-3-beta-D-GalNAc-(1->3)-beta-D-GlcNAc-(1->4)-(O-6-P-alpha-D-Man)]-Thr-[protein] + H+ + UDP

Package: 20 ug, 100 ug, 1 mg

Explain: Chinese Hamster Ovary cell line, CHO-derived human beta-1,4-Glucuronyltransferase 1/B4GAT1 protein.

Definition: Measured by its ability to transfer GlcA from UDP-GlcA to Xylose.

Glycosidases

GE-2001 alpha-Galactosidase A (GLA)

Hydrolysis of terminal, non-reducing alpha-D-galactose residues in alpha-D-galactosides, including galactose oligosaccharides, galactomannans and galactolipids. globoside Gb3Cer (d18:1(4E)) + H_2O = a beta-D-Gal-(1->4)-beta-D-Glc-(1<->1)-Cer(d18:1(4E)) + D-galactose

E.C.: 3.2.1.22

Package: 20 ug, 100 ug, 1 mg

Explain: Chinese Hamster Ovary cell line, CHO-derived human alpha-Galactosidase A/GLA protein.

Definition: Measured by its ability to hydrolyze 4-methylumbelliferyl-alpha -D-galactopyranoside.

GE-2002 alpha-N-acetylgalactosaminidase (NAGA)

Cleavage of non-reducing alpha-(1->3)-N-acetylgalactosamine residues from human blood group A and AB mucin glycoproteins, Forssman hapten and blood group A lacto series glycolipids.

E.C.: 3.2.1.49

Package: 20 ug, 100 ug, 1 mg

Explain: Chinese Hamster Ovary cell line, CHO-derived human alpha-N-acetylgalactosaminidase/NAGA protein.

Definition: Measured by its ability to cleave alpha -N-acetylgalactosaminyl from 4-Nitrophenyl N-acetyl-alpha -D-galactosaminide.

Glycosidases

GE-2003 Tissue alpha-L-Fucosidase (FUCA1)

an alpha-L-fucoside + H_2O = an alcohol + L-fucose

E.C.: 3.2.1.51

Package: 20 ug, 100 ug, 1 mg

Explain: Trichoplusia ni, High Five(baculovirus)-derived human Tissue alpha-L-Fucosidase/FUCA1 protein.

Definition: Measured by its ability to cleave a fluorogenic substrate 4-methylumbelliferyl-alpha -L-fucopyranoside.

GE-2004 Galactosylceramidase/GALC (GALC)

a beta-D-galactosyl-(1<->1')-N-acylsphing-4-enine + H_2O = an N-acylsphing-4-enine + D-galactose

E.C.: 3.2.1.46

Package: 20 ug, 100 ug, 1 mg

Explain: Chinese Hamster Ovary cell line, CHO-derived human Galactosylceramidase/GALC protein.

Definition: Measured by its ability to cleave a fluorogenic substrate, 4-Methylumbelliferyl-beta -D-galactopyranoside.

GE-2005 Glucosylceramidase (GBA)

a beta-D-glucosyl-(1<->1')-N-acylsphing-4-enine + H_2O = an N-acylsphing-4-enine + D-glucose

E.C.: 3.2.1.45

Package: 20 ug, 100 ug, 1 mg

Explain: Chinese Hamster Ovary cell line, CHO-derived human Glucosylceramidase/GBA protein.

Definition: Measured by its ability to hydrolyze 4-methylumbelliferyl-beta -D-glucopyranoside.

GE-2006 Heparanase (HPSE)

endohydrolysis of (1->4)-beta-D-glycosidic bonds of heparan sulfate chains in heparan sulfate proteoglycan.

E.C.: 3.2.1.166

Package: 20 ug, 100 ug, 1 mg

Explain: Chinese Hamster Ovary cell line, CHO-derived human Heparanase/HPSE protein.

Definition: Measured by its ability to release biotinylated heparan sulfate from Recombinant Human Syndecan-4.

Glycosidases

GE-2007 Hyaluronidase 2 (HYAL2)

Random hydrolysis of (1->4)-linkages between N-acetyl-beta-D-glucosamine and D-glucuronate residues in hyaluronate.

E.C.: 3.2.1.35

Package: 20 ug, 100 ug, 1 mg

Explain: Chinese Hamster Ovary cell line, CHO-derived human Hyaluronidase 2/HYAL2 protein.

Definition: Measured by its ability to digest Cy5-Labeled Hyaluronan (Low MW) to dp1-dp4.

GE-2008 alpha-L-Iduronidase (IDUA)

Hydrolysis of unsulfated alpha-L-iduronosidic linkages in dermatan sulfate.

E.C.: 3.2.1.76

Package: 20 ug, 100 ug, 1 mg

Explain: Trichoplusia ni, High Five(baculovirus)-derived human alpha-L-Iduronidase/IDUA protein.

Definition: Measured by its ability to cleave a fluorogenic substrate, 4-Methylumbelliferyl alpha -L-iduronide under the described conditions.

GE-2009 Lysosomal alpha-Glucosidase (GAA)

Hydrolysis of terminal, non-reducing (1->4)-linked alpha-D-glucose residues with release of alpha-D-glucose.

E.C.: 3.2.1.20

Package: 20 ug, 100 ug, 1 mg

Explain: Human embryonic kidney cell, HEK293-derived human Lysosomal alpha-Glucosidase protein.

Definition: Measured by its ability to release glucose from starch under the described conditions.

GE-2010 Mannosyl-oligosaccharide 1,2-alpha-mannosidase IA (MAN1A1)

Involved in the maturation of Asn-linked oligosaccharides. Progressively trim alpha-1,2-linked mannose residues from Man9GlcNAc2 to produce Man5GlcNAc2.

E.C.: 3.2.1.113

Package: 20 ug, 100 ug, 1 mg

Explain: Chinese Hamster Ovary cell line, CHO-derived human MAN1A1 protein.

Definition: Measured by its ability to remove alpha -mannose from the high mannose glycan Man-9 under the described conditions.

Glycosidases

GE-2011 alpha-N-acetylglucosaminidase (NAGLU)

Hydrolysis of terminal non-reducing N-acetyl-D-glucosamine residues in N-acetyl-alpha-D-glucosaminides.

E.C.: 3.2.1.50

Package: 20 ug, 100 ug, 1 mg

Explain: Chinese Hamster Ovary cell line, CHO-derived human alpha-N-acetylglucosaminidase/NAGLU protein.

Definition: Measured by its ability to hydrolyze 4-Nitrophenyl-N-acetyl-alpha -D-glucosaminide under the decribed conditions.

GE-2012 Lysosomal alpha-mannosidase (MAN2B1)

Hydrolysis of terminal, non-reducing alpha-D-mannose residues in alpha-D-mannosides.

E.C.: 3.2.1.24

Package: 20 ug, 100 ug, 1 mg

Explain: Human embryonic kidney cell, HEK293-derived human MAN2B1 protein.

Definition: Measured by its ability to hydrolyze 4-methylumbelliferyl-alpha -D-mannopyranoside under the described conditions.

Sulfatases

GE-2101 Arylsulfatase A (ARSA)

H_2O + N-acyl-1-beta-D-(3-O-sulfo)-galactosyl-sphing-4-enine = a beta-D-galactosyl-(1<->1')-N-acylsphing-4-enine + H^+ + sulfate

E.C.: 3.1.6.8

Package: 20 ug, 100 ug, 1 mg

Explain: Trichoplusia ni, High Five(baculovirus)-derived human Arylsulfatase A/ARSA protein.

GE-2102 Arylsulfatase B (ARSB)

Hydrolysis of the 4-sulfate groups of the N-acetyl-D-galactosamine 4-sulfate units of chondroitin sulfate and dermatan sulfate.

E.C.: 3.1.6.12

Package: 20 ug, 100 ug, 1 mg

Explain: Chinese Hamster Ovary cell line, CHO-derived human Arylsulfatase B/ARSB protein.

Definition: Measured by its ability to hydrolyze the substrate 4-Nitrocatechol Sulfate (PNCS) under the described conditions.

GE-2103 Arylsulfatase G (ARSG)

an aryl sulfate + H2O = a phenol + H^+ + sulfate

E.C.: 3.1.6.1

Package: 20 ug, 100 ug, 1 mg

Explain: Chinese Hamster Ovary cell line, CHO-derived mouse Arylsulfatase G/ARSG protein.

Definition: Measured by its ability to hydrolyze the substrate 4-Nitrocatechol Sulfate (PNCS) under the described conditions.

GE-2104 Glucosamine (N-acetyl)-6-Sulfatase (GNS)

Hydrolysis of the 6-sulfate groups of the N-acetyl-D-glucosamine 6-sulfate units of heparan sulfate and keratan sulfate.

E.C.: 3.1.6.14

Package: 20 ug, 100 ug, 1 mg

Explain: Chinese Hamster Ovary cell line, CHO-derived human Glucosamine (N-acetyl)-6-Sulfatase/GNS protein.

Definition: Measured by its ability to hydrolyze the substrate 4-Nitrocatechol Sulfate (PNCS) under the described conditions.

Sulfatases

GE-2105 Iduronate 2-Sulfatase (IDS)

Hydrolysis of the 2-sulfate groups of the L-iduronate 2-sulfate units of dermatan sulfate, heparan sulfate and heparin.

E.C.: 3.1.6.13

Package: 20 ug, 100 ug, 1 mg

Explain: Trichoplusia ni, High Five(baculovirus)-derived human Iduronate 2-Sulfatase/IDS protein.

Definition: Measured by its ability to hydrolyze the substrate 4-Nitrocatechol Sulfate (PNCS) under the described conditions.

GE-2106 N-Acetylgalactosamine-6-Sulfatase (GALNS)

Hydrolysis of the 6-sulfate groups of the N-acetyl-D-galactosamine 6-sulfate units of chondroitin sulfate and of the D-galactose 6-sulfate units of keratan sulfate.

E.C.: 3.1.6.4

Package: 20 ug, 100 ug, 1 mg

Explain: Trichoplusia ni, High Five(baculovirus)-derived human N-Acetylgalactosamine-6-Sulfatase/GALNS protein.

Definition: Measured by its ability to hydrolyze the substrate 4-Nitrocatechol Sulfate (PNCS) under the described conditions.

GE-2107 Sulfamidase (SGSH)

H_2O + N-sulfo-D-glucosamine = D-glucosamine + sulfate

E.C.: 3.10.1.1

Package: 20 ug, 100 ug, 1 mg

Explain: Trichoplusia ni, High Five(baculovirus)-derived human Sulfamidase/SGSH protein.

Define: Measured by its ability to hydrolyze the substrate 4-Nitrocatechol Sulfate (PNCS) under the described conditions.

Protein Sulfotransferases

GE-3001 Tyrosylprotein Sulfotransferase 1 (TPST1)

3'-phosphoadenylyl sulfate + L-tyrosyl-[protein] = adenosine 3',5'-bisphosphate + H + O-sulfo-L-tyrosine-[protein]

E.C.: 2.8.2.20

Package: 20 ug, 100 ug, 1 mg

Explain: Trichoplusia ni, High Five(baculovirus)-derived human Tyrosylprotein Sulfotransferase 1/TPST1 protein.

Definition: Measured by its ability to transfer sulfate from PAPS to PSGL-1 peptide (Gln-Ala-Thr-Glu-Tyr-Glu-Tyr-Leu-Asp-Tyr-Asp-Phe-Leu-Pro-Glu-Thr) under the described conditions.

GE-3002 Tyrosylprotein Sulfotransferase 2 (TPST2)

3'-phosphoadenylyl sulfate + L-tyrosyl-[protein] = adenosine 3',5'-bisphosphate + H^+ + O-sulfo-L-tyrosine-[protein]

E.C.: 2.8.2.20

Package: 20 ug, 100 ug, 1mg

Explain: Chinese Hamster Ovary cell line, CHO-derived human Tyrosylprotein Sulfotransferase 2/TPST2 protein.

Definition: Measured by its ability to transfer sulfate from PAPS to PSGL-1 peptide (Gln-Ala-Thr-Glu-Tyr-Glu-Tyr-Leu-Asp-Tyr-Asp-Phe-Leu-Pro-Glu-Thr) under the described conditions.

Other Glycobiology-related Enzymes

GE-3003 6-Phosphogluconate Dehydrogenase (PGD)

6-phospho-D-gluconate + $NADP^+$ = CO_2 + D-ribulose 5-phosphate + NADPH

E.C.: 1.1.1.44

Package: 20 ug, 100 ug, 1 mg

Explain: E. coli-derived human 6-Phosphogluconate Dehydrogenase/PGD protein.

Definition: Measured by its ability to dehydrogenate 6-phosphogluconic acid under the described conditions.

Memo