PRODUCT INFORMATION



Asialo Ganglioside G_{M2} Item No. 24629

CAS Registry No.: Formal Name:	35960-33-9 1-O-[O-2-(acetylamino)-2-deoxy- β -D-galactopyranosyl-(1 \rightarrow 4)-O- β -D-galactopyranosyl-(1 \rightarrow 4)- β -D- glucopyranosyl]-ceramide	о но о о
Synonyms:	Asialo-G _{M2} , Asialoganglioside G _{M2} , Gangliotriaosylceramide,	
MF:	$C_{56}H_{104}N_2O_{18}$ (for stearoyl)	HO HO HO
FW:	1,093.4	
Purity:	≥98%	ОН
Supplied as:	A solid	
Storage:	-20°C	
Stability:	≥4 years	
Special Conditions: Forms micellar solution in water		

Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

Laboratory Procedures

Asialo ganglioside G_{M2} (asialo- G_{M2}) is supplied as a solid. A stock solution may be made by dissolving the asialo- G_{M2} in the solvent of choice, which should be purged with an inert gas. Asialo- G_{M2} is soluble in a 2:1:0.1 solution of chloroform:methanol:DI water.

Description

Asialo-G_{M2} is a glycosphingolipid containing three monosaccharide residues and a fatty acid of variable chain length but lacking the sialic acid residue present on ganglioside M_2 . Asialo- G_{M2} levels are low-to-undetectable in normal human brain, but it accumulates in the brain of patients with Tay-Sachs and Sandhoff disease, which are neurodegenerative disorders characterized by deficiency of lysosomal β -hexosaminidase A and B, respectively.¹ It also binds to various bacteria, including *Pseudomonas* isolates derived from cystic fibrosis patients.² This product contains asialo ganglioside GM2 molecular species with variable fatty acyl chain lengths. As this product is derived from a natural source, there may be variations in the sphingoid.

References

- 1. Baek, R.C., Martin, D.R., Cox, N.R., et al. Comparative analysis of brain lipids in mice, cats, and humans with Sandhoff disease. Lipids 44(3), 197-205 (2009).
- 2. Krivan, H.C., Ginsburg, V., and Roberts, D.D. Pseudomonas aeruginosa and Pseudomonas cepacia isolated from cystic fibrosis patients bind specifically to gangliotetraosylceramide (asialo GM1) and gangliotriaosylceramide (asialo GM2). Arch. Biochem. Biophys. 260(1), 493-496 (1988).

WARNING THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

SAFETY DATA

This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the complete Safety Data Sheet, which has been sent via email to your institution.

WARRANTY AND LIMITATION OF REMEDY

uyer agrees to purchase the material subject to Cayman's Terms and Conditions. Complete Terms and Conditions including Warranty and Limitation of Liability information can be found on our website

Copyright Cayman Chemical Company, 11/08/2022

CAYMAN CHEMICAL

1180 EAST ELLSWORTH RD ANN ARBOR, MI 48108 · USA PHONE: [800] 364-9897 [734] 971-3335 FAX: [734] 971-3640 CUSTSERV@CAYMANCHEM.COM WWW.CAYMANCHEM.COM