

PRODUCT INFORMATION



C16 Ganglioside G_{M1} (d18:1/16:0) (ammonium salt)

Item No. 42979

Formal Name: N-[(1S,2R,3E)-1-[[[O-β-D-galactopyranosyl-(1→3)-O-2-(acetylamino)-2-deoxy-β-D-galactopyranosyl-(1→4)-O-[N-acetyl-α-neuraminosyl-(2→3)]-O-β-D-galactopyranosyl-(1→4)-β-D-glucopyranosyl]oxy]methyl]-2-hydroxy-3-heptadecen-1-yl]-hexadecanamide, monoammonium salt

Synonyms: C16 G_{M1}, N-Hexadecanoyl-monosialoganglioside G_{M1}

MF: C₇₁H₁₂₆N₃O₃₁ • NH₄

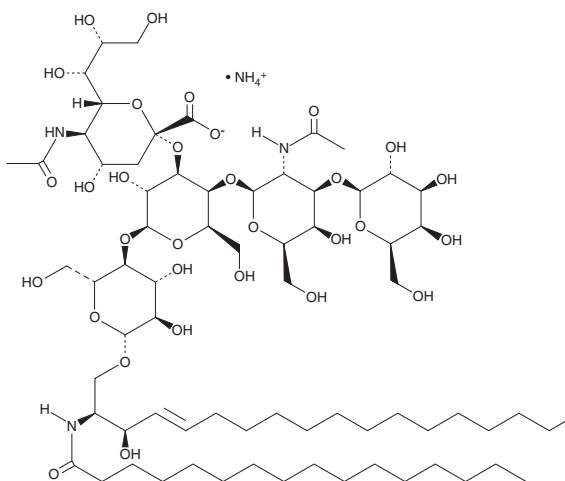
FW: 1,535.8

Purity: ≥98%

Supplied as: A solid

Storage: -20°C

Stability: ≥2 years



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

Laboratory Procedures

C16 Ganglioside G_{M1} (d18:1/16:0) (ammonium salt) is supplied as a solid. A stock solution may be made by dissolving the C16 ganglioside G_{M1} (d18:1/16:0) (ammonium salt) in the solvent of choice, which should be purged with an inert gas. C16 Ganglioside G_{M1} (d18:1/16:0) (ammonium salt) is soluble in a 2:1:0.1 solution of chloroform:methanol:water.

Description

Ganglioside G_{M1} is a monosialylated ganglioside and the prototypic ganglioside for those containing one sialic acid residue.^{1,2} C16 Ganglioside G_{M1} is a monosialylated ganglioside that contains a 16-carbon saturated acyl chain. It has been found in the brain of wild-type mice and mice lacking the gene for α-N-acetylneuraminidase α-2,8-sialyltransferase (*St8sia1null*) but not those lacking the gene for β-1,4-N-acetylgalactosaminyltransferase 1 (*B4galnt1null*).³ As this product is derived from a natural source, there may be variations in the sphingoid backbone.

References

1. Kolter, T. Ganglioside biochemistry. *ISRN Biochem.* 506160 (2012).
2. Mocchetti, I. Exogenous gangliosides, neuronal plasticity and repair, and the neurotrophins. *Cell Mol. Life Sci.* **62**(19-20), 2283-2294 (2005).
3. Mlinac, K., Fabris, D., Vukelić, Ž., *et al.* Structural analysis of brain ganglioside acetylation patterns in mice with altered ganglioside biosynthesis. *Carbohydr. Res.* **382**, 1-8 (2013).

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.

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