

PRODUCT INFORMATION



C16 Galactosylceramide (d18:1/16:0)

Item No. 32600

CAS Registry No.: 34324-89-5

Formal Name: N-[(1S,2R,3E)-1-[(β-D-galactopyranosyloxy)methyl]-2-hydroxy-3-heptadecen-1-yl]-hexadecanamide

Synonyms: Galactosylceramide (d18:1/16:0), Galβ-Cer(d18:1/16:0), GalCer(d18:1/16:0), N-Hexadecanoyl-β-D-Galactosylceramide, Palmitoyl GalCer

MF: C₄₀H₇₇NO₈

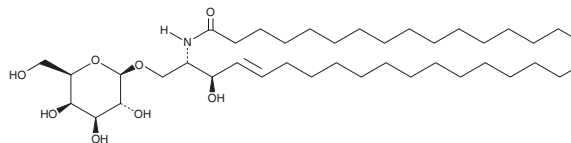
FW: 700.1

Purity: ≥98%

Supplied as: A solid

Storage: -20°C

Stability: ≥4 years



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

Laboratory Procedures

C16 Galactosylceramide (d18:1/16:0) is supplied as a solid. A stock solution may be made by dissolving the C16 galactosylceramide (d18:1/16:0) in the solvent of choice, which should be purged with an inert gas. C16 Galactosylceramide (d18:1/16:0) is soluble in a 2:1 solution of chloroform:methanol.

Description

C16 galactosylceramide (C16 GalCer) is a member of the GalCer class of neutral glycosphingolipids, which are precursors to 3'-sulfo GalCers, also known as sulfatides.^{1,2} GalCers are located in the endoplasmic reticulum but are also found, with 3'-sulfo GalCers, in the myelin membrane of neuronal axons. C16 GalCer can act as an alternate receptor for the HIV-1 envelope glycoprotein gp120.³ As this product is derived from a natural source, there may be variations in the sphingoid backbone.

References

1. Boggs, J.M., Gao, W., Zhao, J., *et al.* Participation of galactosylceramide and sulfatide in glycosynapses between oligodendrocyte or myelin membranes. *FEBS Lett.* **584(9)**, 1771-1778 (2010).
2. Yamaji, T. and Hanada, K. Sphingolipid metabolism and interorganellar transport: Localization of sphingolipid enzymes and lipid transfer proteins. *Traffic* **16(2)**, 101-122 (2015).
3. Bhat, S., Spitalnik, S.L., Gonzalez-Scarano, F., *et al.* Galactosyl ceramide or a derivative is an essential component of the neural receptor for human immunodeficiency virus type 1 envelope glycoprotein gp120. *Proc. Natl. Acad. Sci. USA* **88(16)**, 7131-7134 (1991).

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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