

PRODUCT INFORMATION



C24:1 3'-sulfo Galactosylceramide (d18:1/24:1(15Z))

Item No. 24865

CAS Registry No.: 151057-28-2
Formal Name: N-[(1S)-2R-hydroxy-1-[[[3-O-sulfo-β-D-galactopyranosyl]oxy]methyl]-3E-heptadecen-1-yl]-15Z-tetracosenamide
Synonyms: (3'-sulfo)Galβ-Cer(d18:1/24:1), N-Nervonoyl Sulfatide, C24:1 Sulfatide, cis-Tetracosenoyl Sulfatide, N-Tetracosenoyl (cis-15) Sulfatide

MF: C₄₈H₉₁NO₁₁S

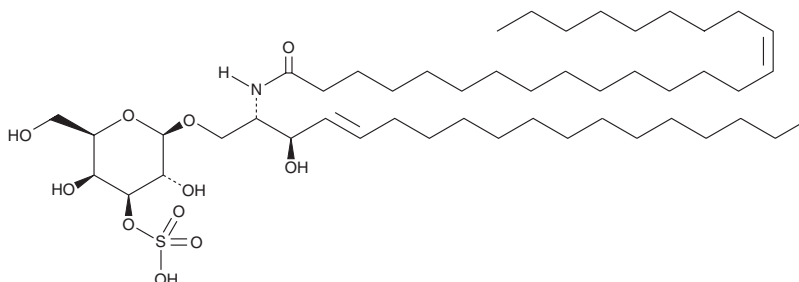
FW: 890.3

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

C24:1 3'-sulfo Galactosylceramide (d18:1/24:1(15Z)) is supplied as a solid. A stock solution may be made by dissolving the C24:1 3'-sulfo galactosylceramide (d18:1/24:1(15Z)) in the solvent of choice. C24:1 3'-sulfo Galactosylceramide (d18:1/24:1(15Z)) is soluble in a 5:1 solution of chloroform:methanol.

Description

C24:1 3'-sulfo Galactosylceramide is a member of the sulfatide class of glycolipids. It is the predominate sulfatide species in mature myelin, and it accumulates at a higher rate than C24 3'-sulfo galactosylceramide (Item No. 24351) in rat cerebellum from seven to 32 days of age when active myelination occurs.¹ It interacts with C-type lectins and immunoglobulin-like receptors with the highest affinity for LMIR5.² It induces production of MCP-1 in basophils but not mast cells and increases the activation of NFAT in a reporter assay via LMIR5. C24:1 3'-sulfo Galactosylceramide is an immunodominant species in myelin, is bound by CD1d *in vitro*, and increases proliferation in isolated mouse splenocytes.³ It reduces symptoms and increases survival in a mouse model of chronic relapsing-remitting experimental autoimmune encephalomyelitis (EAE) when used at a dose of 20 μg.⁴ It also decreases the number of inflammatory lesions and infiltrating mononuclear cells in the lumbar spinal cord of EAE mice. As this product is derived from a natural source, there may be variations in the sphingoid backbone.

References

1. Marbois, B.N., Faull, K.F., Fluharty, A.L., *et al.* *Biochim. Biophys. Acta.* **1484(1)**, 59-70 (2000).
2. Phongsisay, V., Iizasa, E., Hara, H., *et al.* *Mol. Immunol.* **63(2)**, 595-599 (2015).
3. Zajonc, D.M., Maricic, I., Wu, D., *et al.* *J. Exp. Med.* **202(11)**, 1517-1526 (2005).
4. Maricic, I., Halder, R., Bischof, F., *et al.* *J. Immunol.* **193(3)**, 1035-1046 (2014).

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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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