

PRODUCT INFORMATION



C22 Galactosylceramide-d₄ (d18:1/22:0-d₄)

Item No. 9003461

CAS Registry No.: 2750534-73-5

Formal Name: N-((2S,3R,E)-3-hydroxy-1-
(((2R,3R,4S,5R,6R)-3,4,5-trihydroxy-6-
(hydroxymethyl)tetrahydro-2H-pyran-2-yl)
oxy)octadec-4-en-2-yl)docosanamide-d₄

Synonyms: Galactosylceramide-d₄ (d18:1/22:0-d₄),
N-Docosanoyl-β-D-Galactosylceramide-d₄,
GalCer(d18:1/22:0-d₄)

MF: C₄₆H₈₅D₄NO₈

FW: 788.2

Chemical Purity: ≥98% (C22 Galactosylceramide)

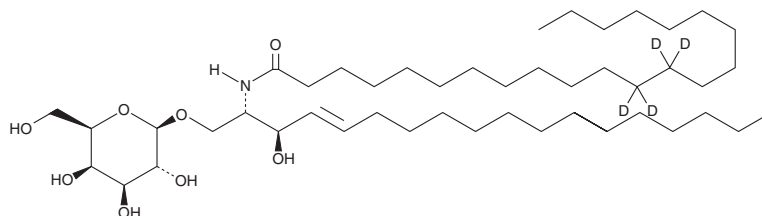
Deuterium

Incorporation: ≥99% deuterated forms (d₁-d₄); ≤1% d₀

Supplied as: A crystalline 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

C22 Galactosylceramide-d₄ is intended for use as an internal standard for the quantification of C22 galactosylceramide (Item No. 9003458) by GC- or LC-MS. The accuracy of the sample weight in this vial is between 5% over and 2% under the amount shown on the vial. If better precision is required, the deuterated standard should be quantitated against a more precisely weighed unlabeled standard by constructing a standard curve of peak intensity ratios (deuterated versus unlabeled).

Description

C22 Galactosylceramide is a sphingolipid that has been found in the central nervous system.^{1,2} C22 Galactosylceramide levels are increased in the spinal cord, but not the brain or liver, of mice fed a methionine-restricted diet.¹ C22 Galactosylceramide has been found in postmortem hippocampus from patients with Alzheimer's disease.² As this product is derived from a natural source, there may be variations in the sphingoid backbone.

References

1. Jové, M., Ayala, V., Ramírez-Núñez, O., et al. Specific lipidome signatures in central nervous system from methionine-restricted mice. *J. Proteome Res.* **12**(6), 2679-2689 (2013).
2. Hejazi, L., Wong, J.W.H., Cheng, D., et al. Mass and relative elution time profiling: Two-dimensional analysis of sphingolipids in Alzheimer's disease brains. *Biochem. J.* **438**(1), 165-175 (2011).

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