

# PRODUCT INFORMATION



## C6 NBD Galactosylceramide (d18:1/6:0)

Item No. 22830

**CAS Registry No.:** 170212-26-7  
**Formal Name:** N-[(1S,2R,3E)-1-[(β-D-galactopyranosyloxy)methyl]-2-hydroxy-3-heptadecen-1-yl]-6-[(7-nitro-2,1,3-benzoxadiazol-4-yl)amino]-hexanamide  
**Synonyms:** N-hexanoyl-NBD-Galactosylceramide, C6 NBD Galactosylceramide, NBD Galactosylceramide (d18:1/6:0), C6-NBD-GalCer, NBD GalCer(d18:1/6:0)

**MF:** C<sub>36</sub>H<sub>59</sub>N<sub>5</sub>O<sub>11</sub>

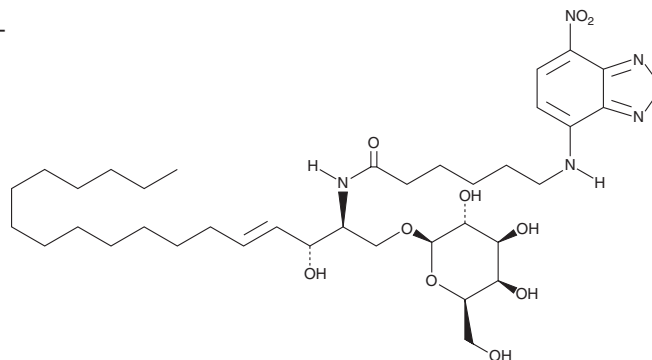
**FW:** 737.9

**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

C6 NBD galactosylceramide (d18:1/6:0) is supplied as a solid. A stock solution may be made by dissolving the C6 NBD galactosylceramide (d18:1/6:0) in the solvent of choice. C6 NBD galactosylceramide (d18:1/6:0) is soluble in the organic solvent methanol as well as in a 5:1 solution of chloroform:methanol.

### Description

C6 NBD galactosylceramide is a biologically active derivative of galactosylceramide that is tagged with a fluorescent C6 nitrobenzoxadiazole (C6 NBD; Item No. 18871) group.<sup>1</sup> C6 NBD galactosylceramide has been used to study intracellular localization and metabolism of galactosylceramide, a sphingolipid whose synthesis is disrupted in Krabbe disease due to a deficiency of galactosylceramide β-galactosidase.<sup>1-3</sup> As this product is derived from a natural source, there may be variations in the sphingoid backbone.

### References

1. Lipsky, N.G. and Pagano, R.E. Sphingolipid metabolism in cultured fibroblasts: Microscopic and biochemical studies employing a fluorescent ceramide analogue. *Proc. Natl. Acad. Sci. U.S.A.* **80(9)**, 2608-2612 (1983).
2. Kok, J.W., Babia, T., and Hoekstra, D. Sorting of sphingolipids in the endocytic pathway of HT29 cells. *J. Cell. Biol.* **114(2)**, 231-239 (1991).
3. Won, J.S., Kim, J., Paintlia, M.K., et al. Role of endogenous psychosine accumulation in oligodendrocytes differentiation and survival: Implication for Krabbe disease. *Brain Res.* **1508**, 44-52 (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.

#### WARRANTY AND LIMITATION OF REMEDY

Buyer 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, 12/22/2022

#### 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