

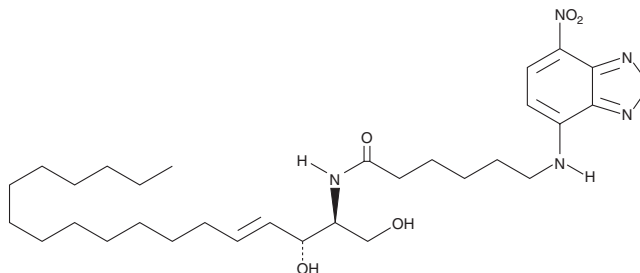
PRODUCT INFORMATION



C6 NBD Ceramide (d18:1/6:0)

Item No. 62527

CAS Registry No.: 94885-02-6
Formal Name: N-[7-(4-nitrobenzo-2-oxa-1,3-diazole)]-6-aminocaproyl-D-erythro-sphingosine
Synonyms: C6 NBD Ceramide, NBD Cer(18:1/2:0), NBD Ceramide (d18:1/6:0), N-C6-NBD-D-erythro-Sphingosine
MF: C₃₀H₄₉N₅O₆
FW: 575.7
Purity: ≥98%
UV/Vis.: λ_{max}: 229, 333, 465 nm
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

C6 NBD ceramide (d18:1/6:0) is supplied as a crystalline solid. A stock solution may be made by dissolving the C6 NBD ceramide (d18:1/6:0) in the solvent of choice. C6 NBD ceramide (d18:1/6:0) is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide (DMF), which should be purged with an inert gas. The solubility of C6 NBD ceramide (d18:1/6:0) in these solvents is approximately 5, 10, and 25 mg/ml, respectively.

C6 NBD ceramide (d18:1/6:0) is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, C6 NBD ceramide (d18:1/6:0) should first be dissolved in DMF and then diluted with the aqueous buffer of choice. C6 NBD ceramide (d18:1/6:0) has a solubility of approximately 500 µg/ml in a 1:1 solution of DMF:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

Description

C6 NBD ceramide is a biologically active fluorescent analog of short-chain, membrane-permeable ceramides.¹ It is as effective as C6 ceramide in the inhibition of viral glycoprotein transport through the Golgi.¹ C6 NBD ceramide has been used as a fluorescent substrate for the activity of UDP-glucose:ceramide glucosyltransferase and to demonstrate the translocation of glucocerebroside and sphingomyelin from the Golgi to the plasma membrane.^{2,3}

References

1. Rosenwald, A.G. and Pagano, R.E. Inhibition of glycoprotein traffic through the secretory pathway by ceramide. *J. Biol. Chem.* **268**, 4577-4579 (1993).
2. Paul, P., Kamisaka, Y., Marks, D.L., *et al.* Purification and characterization of UDP-glucose: Ceramide glucosyltransferase from rat liver Golgi membranes. *J. Biol. Chem.* **271**, 2287-2293 (1996).
3. Lipsky, N.G. and Pagano, R.E. Intracellular translocation of fluorescent sphingolipids in cultured fibroblasts: Endogenously synthesized sphingomyelin and glucocerebroside analogues pass through the golgi apparatus en route to the plasma membrane. *J. Cell. Biol.* **100**, 27-34 (1985).

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

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