

PRODUCT INFORMATION

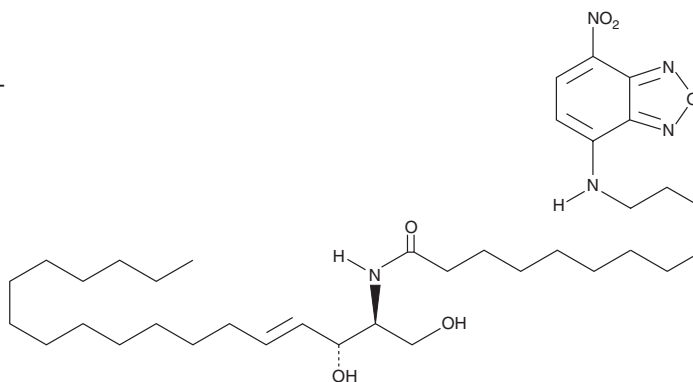


C12 NBD Ceramide (d18:1/12:0)

Item No. 10007958

CAS Registry No.: 202850-01-9
Formal Name: N-[(1S,2R,3E)-2-hydroxy-1-(hydroxymethyl)-3-heptadecen-1-yl]-12-[(7-nitro-2,1,3-benzoxadiazol-4-yl)amino]-dodecanamide
Synonyms: NBD Cer(d18:1/12:0), NBD Ceramide (d18:1/12:0), N-C12-NBD-D-erythro-Sphingosine

MF: C₃₆H₆₁N₅O₆
FW: 659.9
Purity: ≥98%
UV/Vis.: λ_{max}: 333, 465 nm
Supplied as: A crystalline solid
Storage: -20°C
Stability: ≥1 year



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

Laboratory Procedures

C12 NBD ceramide (d18:1/12:0) is supplied as a crystalline solid. A stock solution may be made by dissolving the C12 NBD ceramide (d18:1/12:0) in the solvent of choice, which should be purged with an inert gas. C12 NBD ceramide (d18:1/12:0) is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide (DMF). The solubility of C12 NBD ceramide (d18:1/12:0) in ethanol and DMSO is approximately 20 mg/ml and approximately 30 mg/ml in DMF.

Description

C12 NBD ceramide (d18:1/12:0) is a long-chain fluorescent ceramide analog that can be used for the measurement of alkaline and neutral ceramidase activity.¹ It is hydrolyzed efficiently by alkaline ceramidase from *P. aeruginosa* and by neutral ceramidase from mouse liver. In addition, alkaline and neutral ceramidases from a variety of mammalian cell lines also hydrolyze C12 NBD ceramide (d18:1/12:0). Acid ceramidase does not appear to utilize C-12 NBD ceramide as a substrate. The possibility exists for C12 NBD ceramide (d18:1/12:0) to also be applied to the measurement of ceramide kinase and/or sphingomyelin synthase activity.

Reference

1. Tani, M., Okino, N., Mitsutake, S., *et al.* Specific and sensitive assay for alkaline and neutral ceramidases involving C12-NBD-ceramide. *J. Biochem.* **125**(4), 746-749 (1999).

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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