

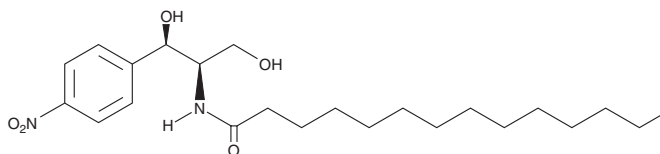
PRODUCT INFORMATION



D-NMAPPD

Item No. 10006305

CAS Registry No.: 35922-06-6
Formal Name: N-[(1R,2R)-2-hydroxy-1-(hydroxy-methyl)-2-(4-nitrophenyl)ethyl]-tetradecanamide
Synonyms: (1R,2R)-B13, CAY10466
MF: C₂₃H₃₈N₂O₅
FW: 422.6
Purity: ≥98%
UV/Vis.: λ_{max}: 202, 275 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

D-NMAPPD is supplied as a crystalline solid. A stock solution may be made by dissolving the D-NMAPPD in an organic solvent purged with an inert gas. D-NMAPPD is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide (DMF). The solubility of D-NMAPPD in ethanol is approximately 20 mg/ml and approximately 10 mg/ml in DMSO and DMF.

D-NMAPPD is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, D-NMAPPD should first be dissolved in ethanol and then diluted with the aqueous buffer of choice. D-NMAPPD has a solubility of approximately 0.3 mg/ml in a 1:2 solution of ethanol:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

Description

D-NMAPPD is an inhibitor of ceramidase.¹ It induces cell death in SW403 colon adenocarcinoma cells in a time- and concentration-dependent manner but has no effect on viability of rat hepatocytes, Kupffer cells, or sinusoidal endothelial cells when used at a concentration of 100 nM. D-NMAPPD increases intracellular ceramide accumulation and cytochrome C release and induces apoptosis in SW403 cells, effects that can be prevented by the caspase-3 inhibitor Ac-DEVD-CHO (Item No. 10017). *In vivo*, D-NMAPPD (75 mg/kg) reduces tumor growth and the number of hepatic metastases in SW403 and LoVo colon cancer mouse xenograft models.

Reference

1. Selzner, M., Bielawska, A., Morse, M.A., *et al.* Induction of apoptotic cell death and prevention of tumor growth by ceramide analogues in metastatic human colon cancer. *Cancer Res.* **61**, 1233-1240 (2001).

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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