

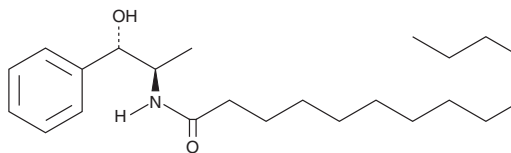
PRODUCT INFORMATION



D-erythro-MAPP

Item No. 10165

CAS Registry No.: 143492-38-0
Formal Name: N-[(1R,2S)-2-hydroxy-1-methyl-2-phenylethyl]-tetradecanamide
Synonym: 1S,2R-D-erythro-2-(N-myristoylamino)-1-phenyl-1-propanol
MF: C₂₃H₃₉NO₂
FW: 361.6
Purity: ≥98%
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-erythro-MAPP is supplied as a crystalline solid. A stock solution may be made by dissolving the D-erythro-MAPP in an organic solvent purged with an inert gas. D-erythro-MAPP is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide (DMF). The solubility of D-erythro-MAPP in these solvents is approximately 0.1 mg/ml in DMSO and 20 mg/ml in ethanol and DMF.

D-erythro-MAPP is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, D-erythro-MAPP should first be dissolved in ethanol and then diluted with the aqueous buffer of choice. D-erythro-MAPP has a solubility of approximately 0.5 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-erythro-MAPP is a derivative of ceramide and an inhibitor of alkaline ceramidase ($K_i = 2-13 \mu\text{M}$; $\text{IC}_{50} = 1-5 \mu\text{M}$).¹ It is selective for alkaline ceramidase over acid ceramidase ($\text{IC}_{50} = >500 \mu\text{M}$) as well as the serine/threonine protein phosphatase CAPP at concentrations up to $10 \mu\text{M}$. D-erythro-MAPP increases intracellular ceramide levels, induces cell cycle arrest at the G₀/G₁ phase, and inhibits growth of HL-60 promyelocytic leukemia cells in a time- and concentration-dependent manner.

Reference

1. Bielawska, A., Greenberg, M.S., Perry, D., et al. (1S,2R)-D-erythro-2-(N-myristoylamino)-1-phenyl-1-propanol as an inhibitor of ceramidase. *J. Biol. Chem.* **271**(21), 12646-12654 (1996).

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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