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: C_{23}H_{29}NO_{2}
FW: 361.6
Purity: ≥98%
Stability: ≥1 year at -20°C
Supplied as: A crystalline solid

Laboratory Procedures

For long term storage, we suggest that D-erythro-MAPP be stored as supplied at -20°C. It should be stable for at least one year.

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 an analog of ceramide that suppresses growth of HL-60 cancer cells in culture. D-erythro-MAPP inhibits alkaline ceramidase with an IC_{50} of approximately 5 µM. Treatment of cultured cells with D-erythro-MAPP elevates the levels of endogenous ceramide, resulting in growth suppression and G_{0}/G_{1} cell cycle arrest.

Reference