

Product Data Sheet

Product Name: AMP-Deoxynojirimycin

Cat. No.: GC41406

Chemical Properties

Cas. No. 216758-20-2

SMILES OC[C@H]1N(CCCCCOCC23CC4CC(CC(C4)C3)C2)C[C@H](O)[C@@H](O)[C@@H]1O

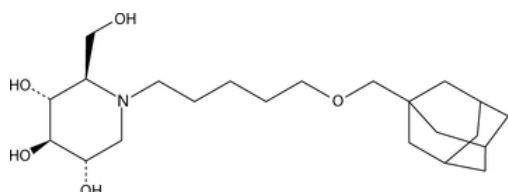
Formula C₂₂H₃₉NO₅ M.Wt 397.6

Solubility DMF: 50 mg/ml, DMSO: 50 mg/ml, Ethanol: 30 mg/ml, Ethanol: PBS (pH 7.2) (1:1): 0.5 mg/ml
Storage Store at -20°C

General tips For obtaining a higher solubility, please warm the tube at 37 °C and shake it in the ultrasonic bath for a while. Stock solution can be stored below -20°C for several months.

Shipping Condition Evaluation sample solution: ship with blue ice. All other available size: ship with RT, or blue ice upon request.

Structure



Background

The lipid messenger ceramide is converted to glucosylceramide by glucosylceramide synthase (GCS). In the reverse direction, non-lysosomal glucosylceramidase (GCase), also known as β -glucosidase 2 (BGD), cleaves the glucosyl moiety from glucosylceramide, liberating ceramide, which can be converted into sphingomyelin. AMP-deoxynojirimycin (AMP-dNM) is a hydrophobic derivative of dNM. It potently inhibits BGD (IC₅₀ = 0.3 nM), less potently antagonizes GCS (IC₅₀ = 25 nM), but only poorly inhibits other GCase isoforms. AMP-dNM has been shown to strongly suppress inflammation in a murine model of hapten-induced colitis, enhance insulin sensitivity in murine and rat models of insulin resistance, and induce sterol regulatory element-binding protein-regulated gene expression and cholesterol synthesis in HepG2 cells.

Caution: Product has not been fully validated for medical applications. For research use only.

Tel: (909) 407-4943 Fax: (626) 353-8530 E-mail: tech@glpbio.com

Address: 10292 Central Ave. #205, Montclair, CA, USA

Product Data Sheet

Caution: Product has not been fully validated for medical applications. For research use only.

Tel: (909) 407-4943 Fax: (626) 353-8530 E-mail: tech@glpbio.com

Address: 10292 Central Ave. #205, Montclair, CA, USA