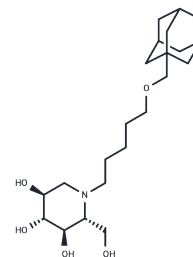


AMP-Deoxynojirimycin

Chemical Properties

CAS No. :	216758-20-2
Formula:	C ₂₂ H ₃₉ N ₅ O ₅
Molecular Weight:	397.55
Storage:	Store at low temperature Powder: -20°C for 3 years In solvent: -80°C for 1 year <i>Actual storage temperature shall be subject to the COA.</i>



Biological Description

Description	AMP-Deoxynojirimycin (AMP-DNM) is a potent inhibitor of ceramide glucosyltransferase and GCase 2, as well as GlcCer biosynthesis, and is utilized in the study of Parkinson's disease and diabetes.
Targets(IC50)	Glucosidase, glycosidase, Transferase
In vitro	In 3T3-L1 cells, AMP-Deoxynojirimycin (10 μM) significantly inhibits the leucine and C17ISO-induced phosphorylation of P70S6K[2].

Solubility Information

Solubility	DMSO: 40 mg/mL (100.62 mM), Sonication is recommended. DMF: 50 mg/mL (125.77 mM), Sonication is recommended. Ethanol: 20 mg/mL (50.31 mM), Sonication is recommended. Ethanol:PBS(pH 7.2) (1:1): 0.5 mg/mL (1.26 mM), Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)
In vivo Formulation	10% DMSO+40% PEG300+5% Tween-80+45% Saline: 2 mg/mL (5.03 mM), Sonication is recommended. <i>Please add the solvents sequentially, clarifying the solution as much as possible before adding the next one. Dissolve by heating and/or sonication if necessary. Working solution is recommended to be prepared and used immediately. The formulation provided above is for reference purposes only. In vivo formulations may vary and should be modified based on specific experimental conditions.</i>

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	2.5154 mL	12.577 mL	25.1541 mL
5 mM	0.5031 mL	2.5154 mL	5.0308 mL
10 mM	0.2515 mL	1.2577 mL	2.5154 mL
50 mM	0.0503 mL	0.2515 mL	0.5031 mL

Please select the appropriate solvent to prepare the stock solution, according to the solubility of the product in different solvents. Please use it as soon as possible.

Note: The dilution table applies only to solid products. For liquid products, please calculate the stock solution based on the stated concentration and/or density.

Reference

Bae EJ, et al. Loss of glucocerebrosidase 1 activity causes lysosomal dysfunction and α -synuclein aggregation. *Exp Mol Med.* 2015 Mar 27;47(3):e153.

Zhu M, et al. Monomethyl branched-chain fatty acid mediates amino acid sensing upstream of mTORC1. *Dev Cell.* 2021 Oct 11;56(19):2692-2702.e5.

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