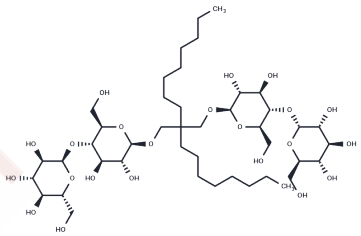
Data Sheet (Cat.No.T38652)

TargetMol

Decyl maltose neopentyl glycol

Chemical Properties



CAS No. : 1257852-99-5

Formula: C43H80O22

Molecular Weight: 949.08

Storage: Keep away from moisture
Powder: -20°C for 3 years | In solvent: -80°C for 1 year
Actual storage temperature shall be subject to the COA.

Biological Description

Description	Decyl maltose neopentyl glycol (DMNG) has a low critical micelle concentration (CMC) and high solubility, and is mainly used for solubilisation and stabilisation of membrane proteins, and is able to mimic the environment of lipid bilayers without disrupting the oligomeric state and natural conformation of proteins.
Targets(IC50)	Others
In vitro	Decyl maltose neopentyl glycol (DMNG) helps maintain the catalytic activity of purified P. putida AlkB (PpAlkB-SII) hydroxylase[1].

Solubility Information

Solubility	DMSO: 8 mg/mL (8.43 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: 1 mg/mL (1.05 mM),Sonication is recommended. *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.*

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	1.0537 mL	5.2683 mL	10.5365 mL
5 mM	0.2107 mL	1.0537 mL	2.1073 mL
10 mM	0.1054 mL	0.5268 mL	1.0537 mL
50 mM	0.0211 mL	0.1054 mL	0.2107 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

Hernan Alonso, et al. Characterization and two-dimensional crystallization of membrane component AlkB of the medium-chain alkane hydroxylase system from Pseudomonas putida GPo1. Appl Environ Microbiol. 2012 Nov;78 (22):7946-53.