

Lauryl maltose neopentyl glycol

#Cat: NB-19-0055-1g	Size: 1g
#Cat: NB-19-0055-5g	Size: 5g
#Cat: NB-19-0055-10g	Size: 10g
#Cat: NB-19-0055-25g	Size: 25g

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CAS No.:	1257852-96-2	HO- ^{s'-O} /IIII-OH
Molecular Formula:	C ₄₇ H ₈₈ O ₂₂	
Molecular Weight:	1005.19	
Target:	Others	
Pathway:	Others	но о- о-
Storage:	-20°C, stored under nitrogen, away from moisture	но он
	* In solvent: -80°C, 6 months; -20°C, 1 month (store	d under nitrogen, away from moisture)

Solvent & Solubility

In vitro

Methanol: 125mg/mL (124.35 mM; Need ultrasonic) DMSO: 100 mg/mL (99.48 mM; Need ultrasonic) H₂O: 100 mg/mL (99.48 mM; Need ultrasonic)

1. Add each solvent one by one: PBS

to 60°C

	Solvant Mass Concentration	1 mg	5 mg	10 mg
Preparing	1 mM	0.9948 mL	4.9742 mL	9.9484 mL
Stock	5 mM	0.1990 mL	0.9948 mL	1.9897 mL
Solutions	10 mM	0.0995 mL	0.4974 mL	0.9948 mL

Solubility: 25mg/mL (24.87mM); Clear solution; Need ultrasonic and warming and heat

2. Add each solvent one by one: 10% DMSO » 40% PEG300 » 5% Tween-80 » 45% saline

HO OH

Please refer to the solubility information to select the appropriate solvent.

3. Add each solvent one by one: 10% DMSO » 90% (20% SBE- β -CD in saline)

In vivo

 Add each solvent on by one: 10% DMSO » 90% corn oil Solubility: ≥ 5.75 mg/mL (5.72mM); Clear solution

Solubility: \geq 5.75 mg/mL (5.72mM); Clear solution

Solubility: \geq 5.75 mg/mL (5.72mM); Clear solution



Biological Activity

- **Description** Lauryl maltose neopentyl glycol (LMNG) is a detergent that can solubilize and stabilize membrane proteins. Lauryl maltose neopentyl glycol extracts integral membrane proteins from membranes, and improves substantially the stability of various membrane proteins, including G protein-coupled receptors and respiratory complexes ^{[1][2]}.
- In Vitro Lauryl maltose neopentyl glycol can yield essentially soluble membrane proteins at detergent concentrations that do notinhibit the cell-free reaction [2].

References

[1]. Breyton C, et, al. Assemblies of lauryl maltose neopentyl glycol (LMNG) and LMNG-solubilized membrane proteins. Biochim Biophys Acta Biomembr. 2019 May1;1861(5):939-957.

[2]. Fogeron ML, et, al. Wheat germ cell-free expression: Two detergents with a low critical micelle concentration allow for production of soluble HCV membrane proteins. Protein Expr Purif. 2015 Jan;105:39-46.

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