

## DODMA

## Chemical Properties

CAS No. : 104162-47-2

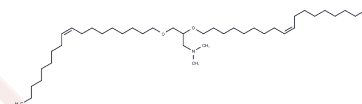
Formula: C<sub>41</sub>H<sub>81</sub>NO<sub>2</sub>

Molecular Weight: 620.09

Keep away from direct sunlight

Storage: 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	DODMA is an ionizable cationic lipid commonly used in the construction of lipid nanoparticles to facilitate nucleic acid encapsulation and intracellular delivery. In acidic environments, DODMA carries a positive charge, which aids in endosomal escape and enhances delivery efficiency; therefore, DODMA holds significant application value in gene delivery and RNA drug research.
Targets(IC50)	Liposome

## Solubility Information

Solubility	DMSO: 100.00 mg/mL (161.27 mM), Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)
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## Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	1.6127 mL	8.0633 mL	16.1267 mL
5 mM	0.3225 mL	1.6127 mL	3.2253 mL
10 mM	0.1613 mL	0.8063 mL	1.6127 mL
50 mM	0.0323 mL	0.1613 mL	0.3225 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

Heyes J, Palmer L, Bremner K, MacLachlan I. Cationic lipid saturation influences intracellular delivery of encapsulated nucleic acids. J Control Release. 2005;107(2):276-287.

Yu B, et al. Insight into mechanisms of cellular uptake of lipid nanoparticles and intracellular release of small RNAs. Pharm Res. 2014 Oct;31(10):2685-95.

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