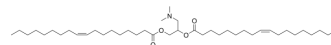


## DODAP

Cat. No.:	HY-130751		
CAS No.:	127512-29-2		
Molecular Formula:	C <sub>41</sub> H <sub>77</sub> NO <sub>4</sub>		
Molecular Weight:	648.05		
Target:	Liposome		
Pathway:	Metabolic Enzyme/Protease		
Storage:	Pure form	-20°C	3 years
		4°C	2 years
	In solvent	-80°C	6 months
		-20°C	1 month



## SOLVENT & SOLUBILITY

### In Vitro

DMSO : 100 mg/mL (154.31 mM; Need ultrasonic)

Concentration	Solvent	Mass		
		1 mg	5 mg	10 mg
Preparing Stock Solutions	1 mM	1.5431 mL	7.7155 mL	15.4309 mL
	5 mM	0.3086 mL	1.5431 mL	3.0862 mL
	10 mM	0.1543 mL	0.7715 mL	1.5431 mL

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

### In Vivo

- Add each solvent one by one: 10% DMSO >> 40% PEG300 >> 5% Tween-80 >> 45% saline  
Solubility: ≥ 2.5 mg/mL (3.86 mM); Clear solution
- Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline)  
Solubility: 2.5 mg/mL (3.86 mM); Suspended solution; Need ultrasonic
- Add each solvent one by one: 10% DMSO >> 90% corn oil  
Solubility: ≥ 2.5 mg/mL (3.86 mM); Clear solution

## BIOLOGICAL ACTIVITY

### Description

DODAP is a cationic lipid. The ionizable lipid DODAP is the lipid component of liposomes (pKa = 5.59 in TNS binding tests). DODAP can be used for siRNA encapsulation and in vitro and in vivo delivery of immunostimulated chemotherapeutic active molecules<sup>[1][2][3][4][5]</sup>.

## REFERENCES

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- [4]. Hamzah J, et al. Targeted liposomal delivery of TLR9 ligands activates spontaneous antitumor immunity in an autochthonous cancer model. *J Immunol.* 2009;183(2):1091-1098.
- [5]. Liu Q, et al. Biotinylated cyclen-contained cationic lipids as non-viral gene delivery vectors. *Chem Biol Drug Des.* 2013;82(4):376-383.
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**Caution: Product has not been fully validated for medical applications. For research use only.**

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