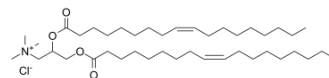


DOTAP chloride

Cat. No.:	HY-112754A
CAS No.:	132172-61-3
Molecular Formula:	C ₄₂ H ₈₀ ClNO ₄
Molecular Weight:	698.54
Target:	Others
Pathway:	Others
Storage:	-20°C, protect from light, stored under argon * In solvent : -80°C, 6 months; -20°C, 1 month (protect from light, stored under argon)



SOLVENT & SOLUBILITY

In Vitro	DMSO : 125 mg/mL (178.94 mM; Need ultrasonic)				
	Preparing Stock Solutions	Solvent \ Mass \ Concentration	1 mg	5 mg	10 mg
		1 mM	1.4316 mL	7.1578 mL	14.3156 mL
		5 mM	0.2863 mL	1.4316 mL	2.8631 mL
		10 mM	0.1432 mL	0.7158 mL	1.4316 mL
Please refer to the solubility information to select the appropriate solvent.					
In Vivo	1. Add each solvent one by one: 10% DMSO >> 40% PEG300 >> 5% Tween-80 >> 45% saline Solubility: ≥ 2.08 mg/mL (2.98 mM); Clear solution 2. Add each solvent one by one: 10% DMSO >> 90% corn oil Solubility: ≥ 2.08 mg/mL (2.98 mM); Clear solution				

BIOLOGICAL ACTIVITY

Description	DOTAP chloride is a useful and effective cationic lipid for transient and stable transfection DNA (plasmids, bacmids) and modified nucleic acids (antisense oligonucleotides) with out the use of helper lipid ^[1] .
IC₅₀ & Target	IC50: Cationic Lipid ^[1]
In Vitro	liposomes are reorganized by associating with DNA. The transfection efficiency of DOTAP liposomes is mainly influenced by lipid composition and cell type, but not by size or zeta potential ^[1] . MCE has not independently confirmed the accuracy of these methods. They are for reference only.

REFERENCES

[1]. Kim BK, et al. DOTAP/DOPE ratio and cell type determine transfection efficiency with DOTAP-liposomes. *Biochim Biophys Acta*. 2015 Oct;1848(10 Pt A):1996-2001.

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