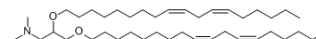


## DLinDMA

<b>Cat. No.:</b>	HY-112757		
<b>CAS No.:</b>	871258-12-7		
<b>Molecular Formula:</b>	C <sub>41</sub> H <sub>77</sub> NO <sub>2</sub>		
<b>Molecular Weight:</b>	616.06		
<b>Target:</b>	Others		
<b>Pathway:</b>	Others		
<b>Storage:</b>	Pure form	-20°C	3 years
		4°C	2 years
	In solvent	-80°C	6 months
		-20°C	1 month



### SOLVENT & SOLUBILITY

#### In Vitro

Ethanol : ≥ 100 mg/mL (162.32 mM)  
 DMSO : 3 mg/mL (4.87 mM; Need ultrasonic)  
 \* "≥" means soluble, but saturation unknown.

Preparing Stock Solutions	Solvent Concentration	Mass		
		1 mg	5 mg	10 mg
	1 mM	1.6232 mL	8.1161 mL	16.2322 mL
	5 mM	0.3246 mL	1.6232 mL	3.2464 mL
	10 mM	0.1623 mL	0.8116 mL	1.6232 mL

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

#### In Vivo

- Add each solvent one by one: 10% EtOH >> 40% PEG300 >> 5% Tween-80 >> 45% saline  
 Solubility: ≥ 2.5 mg/mL (4.06 mM); Clear solution
- Add each solvent one by one: 10% EtOH >> 90% (20% SBE-β-CD in saline)  
 Solubility: 2.5 mg/mL (4.06 mM); Suspended solution; Need ultrasonic
- Add each solvent one by one: 10% EtOH >> 90% corn oil  
 Solubility: ≥ 2.5 mg/mL (4.06 mM); Clear solution

### BIOLOGICAL ACTIVITY

#### Description

DLinDMA, a ionizable cationic lipid, is a key lipid component of stable nucleic acid lipid particles (SNALPs) as a benchmark. DLinDMA is used for siRNA delivery<sup>[1]</sup>.

#### In Vitro

The structure of DLinDMA can be divided into three main regions: the hydrocarbon chains, the linker and the headgroup<sup>[1]</sup>. MCE has not independently confirmed the accuracy of these methods. They are for reference only.

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## In Vivo

DLinDMA has virtually indistinguishable blood pharmacokinetic profiles in mice<sup>[1]</sup>.  
MCE has not independently confirmed the accuracy of these methods. They are for reference only.

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## CUSTOMER VALIDATION

- Nanomedicine. 2021 May 7.

See more customer validations on [www.MedChemExpress.com](http://www.MedChemExpress.com)

## REFERENCES

[1]. Semple SC, et al. Rational design of cationic lipids for siRNA delivery. Nat Biotechnol. 2010 Feb;28(2):172-6.

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

### India Contact:

Life Technologies (India) Pvt. Ltd.

306, Aggarwal City Mall, Opposite M2K Pitampura, Delhi – 110034 (INDIA). Ph: +91-11-42208000, 42208111, 42208222, Mobile: +91-9810521400, Fax: +91-11-42208444

Email: [customerservice@lifetechindia.com](mailto:customerservice@lifetechindia.com) Website: [www.lifetechindia.com](http://www.lifetechindia.com)