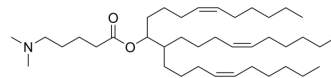


## Genevant CL1

Cat. No.:	HY-46759		
CAS No.:	1450888-71-7		
Molecular Formula:	C <sub>39</sub> H <sub>73</sub> NO <sub>2</sub>		
Molecular Weight:	588		
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 (170.07 mM; ultrasonic and warming and heat to 60°C)			
		Solvent Concentration	Mass	
			1 mg	5 mg
			10 mg	
Preparing Stock Solutions	1 mM	1.7007 mL	8.5034 mL	17.0068 mL
	5 mM	0.3401 mL	1.7007 mL	3.4014 mL
	10 mM	0.1701 mL	0.8503 mL	1.7007 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: ≥ 2.5 mg/mL (4.25 mM); Clear solution			
	2. Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline) Solubility: 2.5 mg/mL (4.25 mM); Suspended solution; Need ultrasonic			
	3. Add each solvent one by one: 10% DMSO >> 90% corn oil Solubility: ≥ 2.5 mg/mL (4.25 mM); Clear solution			

### BIOLOGICAL ACTIVITY

Description	Genevant CL1 is an ionizable lipid (lipid 10, pKa=6.3), and it can be used for mRNA lipid nanoparticle (LNP) vaccine delivery [1][2].
-------------	---

### REFERENCES

[1]. Michael D Buschmann, et al. Nanomaterial Delivery Systems for mRNA Vaccines. Vaccines (Basel). 2021 Jan 19;9(1):65.

---

[2]. Lam K, Leung A, Martin A, et al. Unsaturated, Trialkyl Ionizable Lipids are Versatile Lipid-Nanoparticle Components for Therapeutic and Vaccine Applications. *Adv Mater.* 2023;35(15):e2209624.

---

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

Tel: 609-228-6898

Fax: 609-228-5909

E-mail: [tech@MedChemExpress.com](mailto:tech@MedChemExpress.com)

Address: 1 Deer Park Dr, Suite Q, Monmouth Junction, NJ 08852, USA