ALC-0315

Cat. No.:	HY-138170
CAS No.:	2036272-55-4
Molecular Formula:	C ₄₈ H ₉₅ NO ₅
Molecular Weight:	766.27
Target:	SARS-CoV; Liposome
Pathway:	Anti-infection; Metabolic Enzyme/Protease
Storage:	4°C, protect from light * In solvent : -80°C, 6 months; -20°C, 1 month (protect from light)

SOLVENT & SOLUBILITY

In Vitro Ethanol DMSO : 5 Preparin Stock So	Ethanol : 100 mg/mL (130.50 mM; Need ultrasonic) DMSO : 50 mg/mL (65.25 mM; Need ultrasonic)						
	Preparing Stock Solutions	Solvent Mass Concentration	1 mg	5 mg	10 mg		
		1 mM	1.3050 mL	6.5251 mL	13.0502 mL		
		5 mM	0.2610 mL	1.3050 mL	2.6100 mL		
		10 mM	0.1305 mL	0.6525 mL	1.3050 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 (3.26 mM); Clear solution						
	2. Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline) Solubility: 2.5 mg/mL (3.26 mM); Suspended solution; Need ultrasonic						
	3. Add each solvent one by one: 10% DMSO >> 90% corn oil Solubility: ≥ 2.5 mg/mL (3.26 mM); Clear solution						

BIOLOGICAL ACTIV	
Description	ALC-0315 is an ionisable aminolipid that is responsible for mRNA compaction and aids mRNA cellular delivery and it: cytoplasmic release through suspected endosomal destabilization. ALC-0315 can be used to form lipid nanoparticle delivery vehicles. Lipid-Nanoparticles have been used in the research of mRNA COVID-19 vaccine ^[1] .
In Vitro	ALC-0315 is used to form lipid nanoparticle for the research of vaccination ^[1] . MCE has not independently confirmed the accuracy of these methods. They are for reference only.

Product Data Sheet



• bioRxiv. 2023 Jun 10.

See more customer validations on <u>www.MedChemExpress.com</u>

REFERENCES

[1]. Ferraresso F, Strilchuk AW, Juang LJ, Poole LG, Luyendyk JP, Kastrup CJ. Comparison of DLin-MC3-DMA and ALC-0315 for siRNA Delivery to Hepatocytes and Hepatic Stellate Cells. Mol Pharm. 2022;19(7):2175-2182.

[2]. Moghimi SM. Allergic Reactions and Anaphylaxis to LNP-Based COVID-19 Vaccines. Mol Ther. 2021;29(3):898-900.

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

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