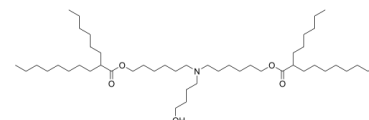


Data Sheet

Product Name:	ALC-0315
Cat. No.:	CS-0145622
CAS No.:	2036272-55-4
Molecular Formula:	C ₄₈ H ₉₅ NO ₅
Molecular Weight:	766.27
Target:	Liposome; SARS-CoV
Pathway:	Anti-infection; Metabolic Enzyme/Protease
Solubility:	DMSO : 50 mg/mL (65.25 mM; Need ultrasonic); Ethanol : 100 mg/mL (130.50 mM; Need ultrasonic)



BIOLOGICAL ACTIVITY:

ALC-0315 is an **ionisable aminolipid** that is responsible for mRNA compaction and aids mRNA cellular delivery and its cytoplasmic release through suspected endosomal destabilization. ALC-0315 can be used to form lipid nanoparticle (LNP) 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].

References:

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

CAIndexNames:

Decanoic acid, 2-hexyl-, 1,1'-[[[4-(4-hydroxybutyl)imino]di-6,1-hexanediyl] ester

SMILES:

OCCCCN(CCCCCCOC(C(CCCCC)CCCCCCCC)=O)CCCCCOC(C(CCCCC)CCCCCCCC)=O

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

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