

Product Data Sheet

Product Name: H1L1A1B3

Cat. No.: GC92044

Chemical Properties

Cas. No. 3097638-09-7

Chemical Name 7-(cyclohexylamino)-6-(N-(3-(dimethylamino)propyl)-4-methylnonanamido)-7-oxoheptyl dodecanoate

SMILES O=C(C(CCCCCOC(CCCCCCCCCC)=O)N(CCCN(C)C)C(CCC(C)CCCC)=O)NC1CCCCC1

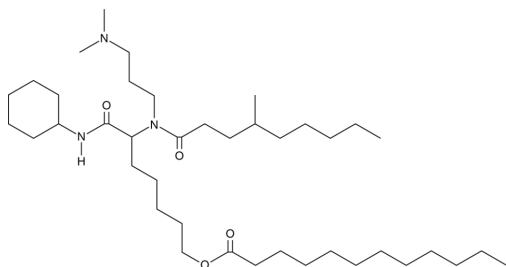
Formula $C_{40}H_{77}N_3O_4$ M.Wt 664.1

Solubility Ethanol: Soluble: ≥ 10 mg/ml Storage -20°C

General tips For obtaining a higher solubility, please warm the tube at 37°C and shake it in the ultrasonic bath for a while. Stock solution can be stored below -20°C for several months.

Shipping Condition Evaluation sample solution: ship with blue ice All other available size: ship with RT, or blue ice upon request.

Structure



Background

H1L1A1B3 is an ionizable cationic lipid that has been used in combination with other lipids in the formation of lipid nanoparticles (LNPs) for the delivery of circular RNA (circRNA) *in vitro* and *in vivo*.¹ LNPs containing H1L1A1B3 and encapsulating circRNA encoding IL-12 induce IL-12 production four times more effectively than LNPs containing ALC-0315 and encapsulating the same circRNA in LLC1 murine Lewis lung carcinoma cells. Administration of LNPs containing H1L1A1B3 and encapsulating circRNA encoding IL-12 reduces tumor growth in an LLC1 murine Lewis lung carcinoma model in combination with an antibody against programmed cell death ligand 1 (PD-L1).

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

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References:

[1]. Xu, S., Xu, Y., Solek, N.C., et al. Tumor-tailored ionizable lipid nanoparticles facilitate IL-12 circular RNA delivery for enhanced lung cancer immunotherapy. *Adv. Mater.* 36(29):e2400307 (2024).

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