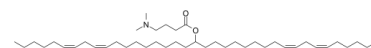


Data Sheet

Product Name:	D-Lin-MC3-DMA
Cat. No.:	CS-0044321
CAS No.:	1224606-06-7
Molecular Formula:	C43H79NO2
Molecular Weight:	642.09
Target:	Others
Pathway:	Others
Solubility:	DMSO : ≥ 43.33 mg/mL (67.48 mM); Ethanol : 16.67 mg/mL (25.96 mM; Need ultrasonic)



BIOLOGICAL ACTIVITY:

D-Lin-MC3-DMA, an ionizable cationic lipid, is a potent siRNA delivery vehicle. **In Vivo:** Lipid nanoparticles (LNPs) containing distearoylphosphatidylcholine (DSPC), and ionizable amino-lipids such as dilinoleylmethyl-4-dimethylaminobutyrate (DLin-MC3-DMA) are potent siRNA delivery vehicles in vivo. LNP-siRNA systems optimize to achieve maximum gene silencing potency in hepatocytes following IV administration in mice contain DLin-MC3-DMA (MC3), DSPC, cholesterol and a polyethyleneglycol (PEG)-lipid at mole ratios of 50/10/38.5/1.5. DLin-MC3-DMA exhibits an optimized pK_a value that leads to dramatically enhanced potency^[1].

References:

[1]. Kulkarni JA, et al. Design of lipid nanoparticles for in vitro and in vivo delivery of plasmid DNA. Nanomedicine. 2017 May;13(4):1377-1387.

CAIndexNames:

Butanoic acid, 4-(dimethylamino)-, (10Z,13Z)-1-(9Z,12Z)-9,12-octadecadien-1-yl-10,13-nonadecadien-1-yl ester

SMILES:

O=C(OC(CCCCCCCC/C=C\C/C=C\CCCC)CCCCCCCC/C=C\C/C=C\CCCC)CCCN(C)C

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

Tel: 732-484-9848 Fax: 888-484-5008 E-mail: sales@ChemScene.com

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