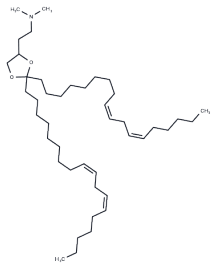
Data Sheet (Cat.No.T15139)

TargetMol

DLin-KC2-DMA

Chemical Properties



CAS No. : 1190197-97-7

Formula: C43H79NO2

Molecular Weight: 642.09

Appearance: no data available

Storage: store at low temperature
Powder: -20°C for 3 years | In solvent: -80°C for 1 year

Biological Description

Description	DLin-KC2-DMA is a cation that can be used for siRNA delivery and is also an ionizable lipid. DLinKC2-DMA can bind to LNP and enable siRNA-mediated GAPDH gene silencing.
Targets(IC50)	Others
In vitro	**METHODS**: Macrophages (MΦ) and dendritic cells (DC) were treated with DLinKC2-DMA (1,5μg/mL) to observe the effect of DLinKC2-DMA on siRNA-mediated gene silencing. GAPDH and control α-tubulin expression were evaluated using Western blot analysis and flow cytometry. **RESULTS** At a dose level of 5μg/ml, LNPs containing DLinKC2-DMA were again the most effective gene silencing agents. [1]
In vivo	**METHODS**: C57Bl6 mice were injected with DLinKC2-DMA-formulated LNP siRNA (5 mg/kg, tail vein injection) via the tail vein to study the in vivo gene silencing properties of DLinKC2-DMA-formulated LNP siRNA. **RESULTS** DLinKC2-DMA effectively silenced target genes in APcs in vivo. [1]

Solubility Information

Solubility	Ethanol: 50 mg/mL (77.87 mM),Sonication is recommended. DMSO: 100 mg/mL (155.74 mM),Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	1.5574 mL	7.7871 mL	15.5741 mL
5 mM	0.3115 mL	1.5574 mL	3.1148 mL
10 mM	0.1557 mL	0.7787 mL	1.5574 mL
50 mM	0.0311 mL	0.1557 mL	0.3115 mL

Please select the appropriate solvent to prepare the stock solution, according to the solubility of the product in different solvents. Please use it as soon as possible.

Reference

Basha G, et al. Influence of cationic lipid composition on gene silencing properties of lipid nanoparticle formulations of siRNA in antigen-presenting cells. Mol Ther. 2011 Dec;19(12):2186-200.