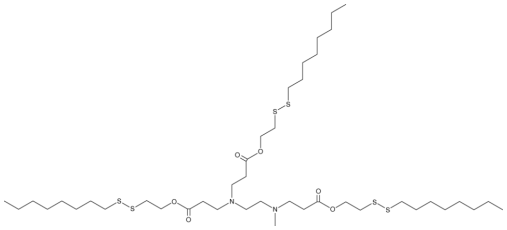
Product Data Sheet

Product Name: 2N12B
Cat. No.: GC91824

Chemical Properties

Cas. No.	N/A		
Formula	$C_{42}H_{82}N_2O_6S_6$	M.Wt	903.5
Solubility	DMSO: Soluble: ≥10 mg/ml,Ethanol: Slightly Soluble: 0.1-1 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

2N12B is a disulfide bond-containing ionizable cationic lipid (pK_a = 6.5) that has been used in the generation of lipid nanoparticles (LNPs) for siRNA delivery *in vitro* and *in vivo*.[1] LNPs containing 2N12B and encapsulating siRNA targeting *VEGFA* mRNA reduce VEGFA levels in ARPE-19 retinal pigment cells, as well as reduce migration of human umbilical vein endothelial cells (HUVECs) in a wound healing assay. LNPs containing 2N12B and encapsulating siRNA targeting *Vegfa* mRNA reduce Vegfa levels in isolated mouse retina, as well as inhibit retinal angiogenesis and decrease fundus vessel leakage, in a mouse model of oxygen-induced retinopathy.

References:
[1].Cao, X., Su, L., and Chen, H.A potent bioreducible ionizable lipid nanoparticle enables siRNA delivery for retinal neovascularization inhibitionEur. J. Pharm. Biopharm.199114296(2024).

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