

4A3-SC8

Chemical Properties

CAS No. : 1857340-78-3

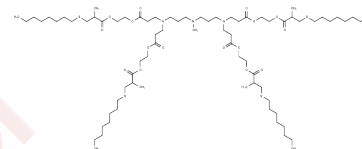
Formula: C75H139N3O16S4

Molecular Weight: 1467.18

Store at low temperature

Storage: Pure form: -20°C for 3 years | In solvent: -80°C for 1 year

Actual storage temperature shall be subject to the COA.



Biological Description

Description	4A3-SC8 is a modular dendritic macromolecule with cationic and lipophilic groups that enables small RNAs to prolong survival in an aggressive hepatocellular carcinoma model and can be used to synthesize lipid nanoparticles.
Targets(IC50)	Liposome
In vitro	4A3-SC8 (100 mg/kg) is a biodegradable dendrimer with low toxicity and high delivery efficiency in mice carrying invasive liver cancer[1].
In vivo	After intravenous injection of 1 mg/kg siRNA, 4A3-SC8 mediated the primary accumulation of siRNA in the liver, with lesser amounts in the spleen and kidneys, and resulted in greater than 95% knockdown of FVII in mice [1]. Following administration of 4A3-SC8 (100 mg/kg with 4 mg/kg control siRNA siCTR; i.v.; once), the mice exhibited illness and a significant weight loss of nearly 20% on the first day post injection [1].

Solubility Information

Solubility	DMSO: 80 mg/mL (54.53 mM), Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)
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Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	0.6816 mL	3.4079 mL	6.8158 mL
5 mM	0.1363 mL	0.6816 mL	1.3632 mL
10 mM	0.0682 mL	0.3408 mL	0.6816 mL
50 mM	0.0136 mL	0.0682 mL	0.1363 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.

Note: The dilution table applies only to solid products. For liquid products, please calculate the stock solution based on the stated concentration and/or density.

Reference

Zhou K, et al. Modular degradable dendrimers enable small RNAs to extend survival in an aggressive liver cancer model. Proc Natl Acad Sci U S A. 2016 Jan 19;113(3):520-5.

Inhibitor · Natural Compounds · Compound Libraries · Recombinant Proteins

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