

PRODUCT INFORMATION



4A3-SC10

Item No. 44320

CAS Registry No.: 1857340-80-7

Synonym: 4A3-SC-10

MF: $C_{83}H_{155}N_3O_{16}S_4$

FW: 1,579.4

Purity: $\geq 95\%$

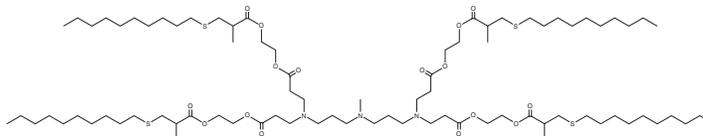
Supplied as: A 10 mg/ml solution in methyl acetate

Storage: $-20^{\circ}C$

Stability: ≥ 2 years

Special Conditions: Degrades in protic solvents

Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.



Description

4A3-SC10 is an ionizable cationic lipid ($pK_a = 6.57$) that has been used in the generation of lipid nanoparticles (LNPs) for the delivery of mRNA *in vitro* and *in vivo*.¹ LNPs containing 4A3-SC10 selectively accumulate in the liver, kidney, and spleen in mice. LNPs containing 4A3-SC10 and encapsulating an mRNA reporter induce reporter expression in 4T1 breast cancer cells, B16/F10 melanoma cells, and AML12 hepatocytes.

Reference

1. Chen, Z., Tian, Y., Yang, J., *et al.* Modular design of biodegradable ionizable lipids for improved mRNA delivery and precise cancer metastasis delineation *in vivo*. *J. Am. Chem. Soc.* **145(44)**, 24302-24314 (2023).

WARNING

THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

SAFETY DATA

This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the [complete](#) Safety Data Sheet, which has been sent via email to your institution.

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