

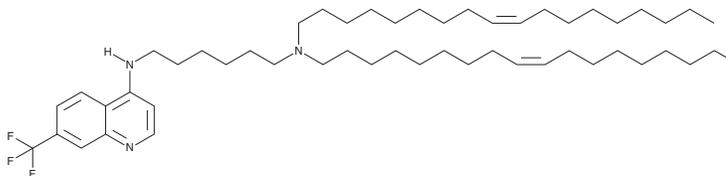
PRODUCT INFORMATION



CF3-2N6-UC18

Item No. 44140

CAS Registry No.: 3042854-95-2
Formal Name: N¹,N¹-di-9-octadecen-1-yl-N⁶-[7-(trifluoromethyl)-4-quinolinyl]-1,6-hexanediamine
MF: C₅₂H₈₈F₃N₃
FW: 812.3
Purity: ≥90%
Supplied as: A neat oil
Storage: -20°C
Stability: ≥2 years



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

Laboratory Procedures

CF3-2N6-UC18 is supplied as a neat oil. A stock solution may be made by dissolving the CF3-2N6-UC18 in the solvent of choice, which should be purged with an inert gas. CF3-2N6-UC18 is soluble (≥10 mg/ml) in ethanol.

Description

CF3-2N6-UC18 is an ionizable cationic and chloroquine-derived lipid that has been used in the generation of lipid nanoparticles (LNPs) for the delivery of mRNA *in vitro* and *in vivo*.¹ LNPs containing CF3-2N6-UC18 and encapsulating a Cy5-mRNA reporter exhibit increased cellular uptake *via* micropinocytosis and improved endosomal escape compared with LNPs containing non-chloroquine-derived lipids. LNPs containing CF3-2N6-UC18 selectively accumulate in mouse lymph nodes after intravenous administration.

Reference

1. Liu, Z., Wu, J., Wang, N., *et al.* Structure-guided design of endosomolytic chloroquine-like lipid nanoparticles for mRNA delivery and genome editing. *Nat. Commun.* **16(1)**, 4241 (2025).

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.

WARRANTY AND LIMITATION OF REMEDY

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