

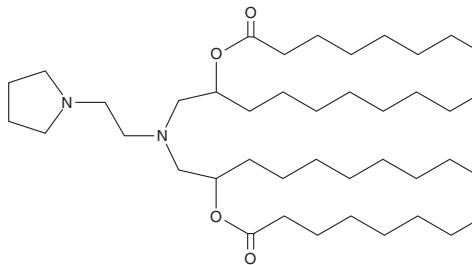
PRODUCT INFORMATION



11-10-8

Item No. 40747

CAS Registry No. 3078748-21-4
Formal Name: ((2-(pyrrolidin-1-yl)ethyl)azanediyl) bis(decane-1,2-diyl) dioctanoate
MF: $C_{42}H_{82}N_2O_4$
FW: 679.1
Purity: $\geq 95\%$
Supplied as: A 50 mg/ml solution in ethanol
Storage: -20°C
Stability: ≥ 1 year



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

Laboratory Procedures

11-10-8 is supplied as a solution in ethanol. To change the solvent, simply evaporate the ethanol under a gentle stream of nitrogen and immediately add the solvent of choice. 11-10-8 is sparingly soluble (1-10 mg/ml) in DMSO.

Description

11-10-8 is an ionizable cationic lipid ($pK_a = 6.22$) that has been used in the generation of lipid nanoparticles (LNPs) for mRNA delivery *in vivo*.¹ LNPs containing 11-10-8 and encapsulating mRNA encoding the Cas9 nuclease and small-guide RNA (sgRNA) targeting transthyretin (TTR), a thyroid hormone carrier protein, decrease serum levels of TTR in mice. LNPs containing 11-10-8 and encapsulating mRNA encoding human fibroblast growth factor 21 (hFGF21) increase serum levels of hFGF21, decrease body and liver weights, and reduce the liver steatosis score in a mouse model of obesity induced by a high-fat diet.

Reference

1. Han, X., Xu, J., Xu, Y., *et al.* In situ combinatorial synthesis of degradable branched lipidoids for systemic delivery of mRNA therapeutics and gene editors. *Nat. Commun.* **15**(1), 1762 (2024).

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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