

PRODUCT INFORMATION



Lipid 392

Item No. 46050

CAS Registry No.: 3047517-72-3

Formal Name: N',N'''-(12-(2-hydroxydecyl)-8-methyl-15,18-dioxo-4-(3-oxopropyl)-4,8,12,16,17-pentaazatritriacontanoyl) di(palmitohydrazide)

MF: $C_{74}H_{147}N_9O_7$

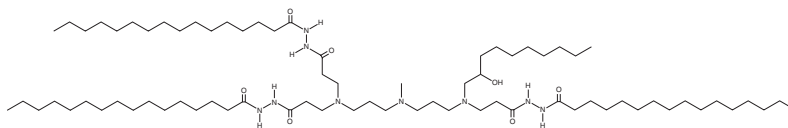
FW: 1,275.0

Purity: $\geq 95\%$

Supplied as: A solid

Storage: -20°C

Stability: ≥ 4 years



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

Laboratory Procedures

Lipid 392 is supplied as a solid. A stock solution may be made by dissolving the lipid 392 in the solvent of choice, which should be purged with an inert gas. Lipid 392 is sparingly soluble (1-10 mg/ml) in ethanol.

Description

Lipid 392 is a lung-targeted ionizable cationic lipid that has been used in the generation of lipid nanoparticles (LNPs) for the delivery of mRNA, single-guide (sgRNA), or siRNA *in vivo*.¹ Simplified targeted LNPs (stLNPs) containing lipid 392 and encapsulating Cre recombinase mRNA are delivered to the lung, resulting in gene editing efficiencies of approximately 68, 70, and 32% for lung endothelial, epithelial, and immune cells, respectively, in Ai14 reporter mice. Lipid 392-containing stLNPs encapsulating IL-10 mRNA reduce lung inflammation and damage in a mouse model of acute lung injury.

Reference

1. Fei, Y., Lin, Y., Liu, P., *et al.* Optimization of lipid nanoparticles for safe and versatile lung-targeted RNA delivery and disease therapy. *ACS Nano* **20(21)**, 15347-15362 (2026).

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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