

# PRODUCT INFORMATION



## Lipid H7T4-4

Item No. 43860

**Formal Name:** 1,1',1'',1'''-(1,4,7,10-tetraazacyclododecane-1,4,7,10-tetrayl)tetrakis(tetradecan-2-ol)

**MF:** C<sub>64</sub>H<sub>132</sub>N<sub>4</sub>O<sub>4</sub>

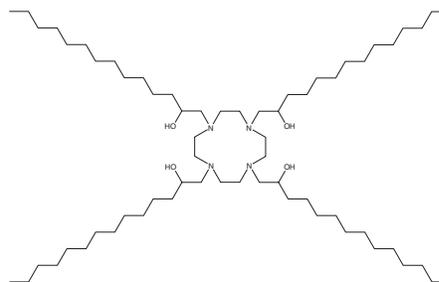
**FW:** 1,021.8

**Purity:** ≥95%

**Supplied as:** A 10 mg/ml solution in ethanol

**Storage:** -20°C

**Stability:** ≥2 years



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

### Laboratory Procedures

Lipid H7T4-4 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. Solvents such as chloroform and methanol purged with an inert gas can be used. Lipid H7T4-4 is slightly soluble (0.1-1 mg/ml) in chloroform and methanol.

### Description

Lipid H7T4-4 is an ionizable cationic lipid that has been used in the generation of lipid nanoparticles (LNPs) for the delivery of mRNA *in vitro* and *in vivo*.<sup>1</sup> LNPs containing lipid H7T4-4 and encapsulating an mRNA reporter induce luciferase expression in AsPC-1 pancreatic cancer cells *in vitro* and in an AsPC-1 mouse xenograft model.

### Reference

1. Shin, J.E., Won, E.-j., Xu, J., *et al.* Transition temperature-guided design of lipid nanoparticles for effective mRNA delivery. *ACS Appl. Mater. Interfaces* **17**(19), 28012-28024 (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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