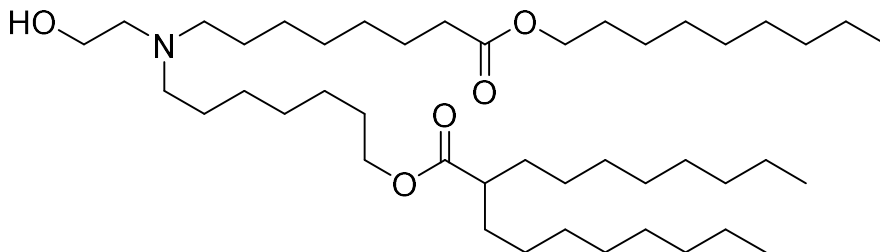


## Lipid M

**Catalog number:** N-1103



**Molecular Formula:** C<sub>44</sub>H<sub>87</sub>NO<sub>5</sub>

**MW:** 710.18

**CAS:** 2089251-57-8

**Alternative Names:** 7-((2-hydroxyethyl)(8-(nonyloxy)-8-oxooctyl)amino)heptyl 2-octyldecanoate

**Solubility:** Ethanol, chloroform, ethyl acetate >5 mg/mL

**Storage and Handling:** Store dry at -20 °C. Stock solutions should be stored frozen (-20 °C or below).

**Background:** Lipid M is an ionizable lipid used to form lipid nanoparticles for delivering RNA. LNPs formulated with Lipid M delivered luciferase mRNA in mice resulting in higher protein expression compared to the benchmark lipid DLin-MC3-DMA. Lipid M LNPs delivering IgG mRNA showed prolonged expression compared to MC3 in non-human primates after intramuscular injection.

**References:** 1) Hassett KJ, Benenato KE, et al. Optimization of Lipid Nanoparticles for Intramuscular Administration of mRNA Vaccines. *Mol Ther Nucleic Acids*. 2019 Apr 15;15:1-11. doi: 10.1016/j.omtn.2019.01.013.

**Hazardous Properties and Cautions:** The toxicological and pharmacological properties of this compound are not fully known. For further information see the MSDS on request. This product is manufactured and shipped only in small quantities, intended for research and development in a laboratory utilizing prudent procedures for handling chemicals of unknown toxicity, under the supervision of persons technically qualified to evaluate potential risks and authorized to enforce appropriate health and safety measures. As with all research chemicals, precautions should be taken to avoid unnecessary exposures or risks.

**Warranty and Disclaimer:** Echelon warrants the product conforms to the specifications stated herein. In the event of nonconformity, Echelon will replace products or refund purchase price, at its sole option, and Echelon shall not be responsible for any other loss or damage, whether known or foreseeable to Echelon. No other warranties apply, express or implied, including but not limited to warranty of fitness for any purpose or implied warranty of merchantability. Purchaser is solely responsible for all consequences of its use of the product and Echelon assumes no responsibility therefore, including success of purchaser's research and development, or health or safety of any uses of the product.

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