

OC2-K3-E10

Catalog number: N-1210

Molecular Formula: $C_{54}H_{111}N_5O_7$

MW: 942.51

CAS#: 2933216-12-5

HO NH HO OH

Alternative Names: 3,3'-((2-hydroxyethyl)azanediyl)bis(N-(3-(bis(2-hydroxydecyl)amino)propyl)propanamide)

Solubility: Methanol, ethanol, dichloromethane >5 mg/mL

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

Background: OC2-K3-E10 is an ionizable lipid for delivery of mRNA in lipid nanoparticles (LNPs). OC2-K3-E10 LNPs delivered Firefly luciferase mRNA when injected intramuscularly in mice and resulted in comparable levels of luminescence as SM-102 LNPs. LNPs were also able to deliver Cas9 mRNA and sgRNA into genetically modified mice. LNPs containing OC2-K3-E10 were able to encapsulate four-fold more mRNA copies per particle compared to SM-102.

References: G. Tilstra, J. Couture-Senécal, *et al.* "Iterative Design of Ionizable Lipids for Intramuscular mRNA Delivery" *Journal of the American Chemical Society* **2023** *145* (4), 2294-2304. DOI: 10.1021/jacs.2c10670.

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.

Technical Data Sheet, Rev 2, 5/22/2024 - For research use only. Not intended for diagnostic or therapeutic use.



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