

OF-02

Catalog number: N-1022

Molecular Formula: $C_{84}H_{152}N_4O_6$

MW: 1314.16

CAS#: 1883431-67-1

Alternative Names: 3,6-bis(4-(bis((9Z,12Z)-2-hydroxyoctadeca-9,12-dien-1-yl)amino)butyl)piperazine-2,5-dione

Solubility: Ethanol, methanol, dichloromethane, >10 mg/mL

Storage and Handling: Store dry at -20 °C or below, protected from light. Stock solutions should be stored at -20 °C

Background: OF-02 is an ionizable lipid used for delivery of RNA in lipid nanoparticles (LNPs). OF-02 LNPs were able to deliver mRNA coding for human erythropoietin (EPO) in a mouse model resulting in increased EPO levels in serum. OF-02 LNPs yielded 2X more EPO compared to LNPs comprised of the benchmark ionizable lipid cKK-E12.

References: O.S. Fenton, K.J. Kauffman, et al. "Bioinspired Alkenyl Amino Alcohol Ionizable Lipid Materials for Highly Potent *in vivo* mRNA Delivery" *Adv. Mat.* 2016; 28(15): 2939–2943. doi:10.1002/adma.201505822.

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 1, 5/21/2024 – For research use only. Not intended for diagnostic or therapeutic use.



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