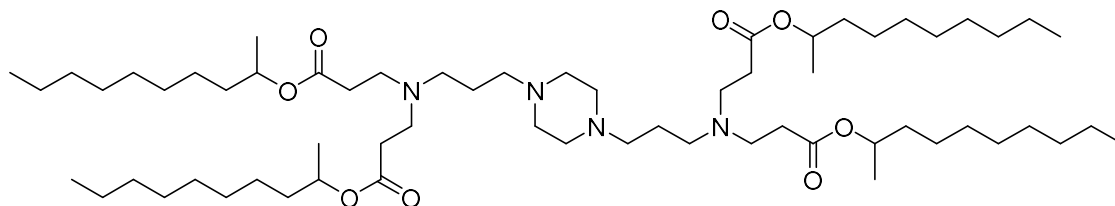


4-O10b1

Catalog number: N-1114



Molecular Formula: C₆₂H₁₂₀N₄O₈

MW: 1049.66

CAS#: n/a

Alternative Names: Tetra(decan-2-yl) 3,3',3'',3'''-((piperazine-1,4-diylbis(propane-3,1-diyl))bis(azanetriyl))-tetraproionate

Solubility: Chloroform, methanol, ethanol

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

Background: 4-O10b1 is an ionizable lipid used to generate lipid nanoparticles (LNPs) for delivering RNA to cells. LNPs comprised of 4-O10b1 and conjugated with the macrophage antibody F4/80 were able to delivery siRNA targeting TAK1 to RAW264.7 cells resulting in suppressed activation of NF-κB. Intranasal administration reduced lung injury in an influenza mouse model.

References: Zhao G, Xue L, Geisler HC, Xu J, Li X, Mitchell MJ, Vaughan AE. Precision treatment of viral pneumonia through macrophage-targeted lipid nanoparticle delivery. Proc. Natl. Acad. Sci. USA. 2024 Feb 13;121(7):e2314747121. doi: 10.1073/pnas.2314747121.

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, 5/28/2024 – **For research use only.** Not intended for diagnostic or therapeutic use.

