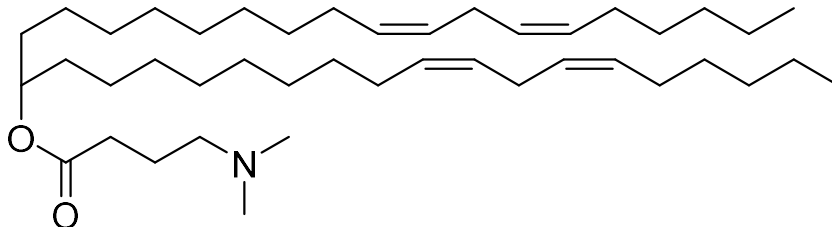


DLin-MC3-DMA

Catalog number: N-1282



Molecular Formula: C₄₃H₇₉NO₂

MW: 642.11

CAS#: 1224606-06-7

Alternative Names: (6Z,9Z,28Z,31Z)-heptatriaconta-6,9,28,31-tetraen-19-yl 4-(dimethylamino)butanoate

Solubility: Methanol, ethanol, chloroform, DMSO

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

Background: DLin-MC3-DMA is an ionizable lipid used in combination with other lipids for encapsulation of RNA and DNA into lipid nanoparticles (LNPs). Administration of DLin-MC3-DMA based LNPs have delivered siRNA and reduced Factor VII levels in mice. Delivery of BCR-ABL siRNA reduced leukemic burden in a mouse model of chronic myeloid leukemia (CML). A formulation for treating Hereditary Transthyretin-Mediated (hATTR) Amyloidosis in the clinic.

References: 1) Jayaraman, M., Ansell, S.M., Mui, B.L., et al. (2012) "Maximizing the potency of siRNA lipid nanoparticles for hepatic gene silencing in vivo. *Angew. Chem. Int. Ed. Engl.* 51(34), 8529-8533. DOI: 10.1002/anie.201203263.

2) Kulkarni, JA, Myhre, JL, Chen, S, et al. (2017) "Design of lipid nanoparticles for in vitro and in vivo delivery of plasmid DNA." *Nanomedicine.* 13(4):1377-1387. DOI: 10.1016/j.nano.2016.12.014.

3) Jyotsana N, Sharma A, Chaturvedi A, et al. (2019) "Lipid nanoparticle-mediated siRNA delivery for safe targeting of human CML in vivo." *Ann Hematol.* 98(8):1905-1918. doi: 10.1007/s00277-019-03713-y.

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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