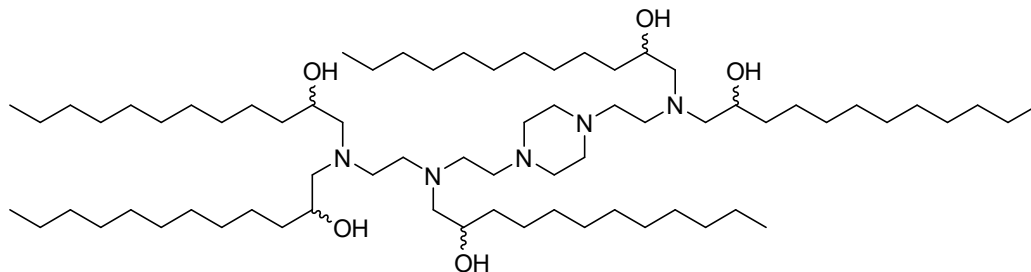


C12-200

Catalog number: N-1220



Molecular Formula: $C_{70}H_{145}N_5O_5$

MW: 1136.96

CAS#: 1220890-25-4

Alternative Names: 1,1-((2-(4-(2-((2-(bis(2-hydroxydodecyl)amino)ethyl)(2-hydroxydodecyl)amino)ethyl)-piperazin-1-yl)ethyl)azanediyl)bis(dodecan-2-ol)

Solubility: ~5 mg/mL in methanol

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

Background: C12-200 is an ionizable lipid used to generate lipid nanoparticles (LNPs) for delivery of siRNA, mRNA, and saRNA in several cell types and animal models. C12-200 LNPs were able to safely deliver placental growth factor mRNA to the placenta in a pregnant mouse model.

References:

- 1) Kevin T. Love et al; Lipid-like materials for low-dose in vivo gene silencing, PNAS, 2010, 107(5): 1864-1869.
- 2) Whitehead, K. A. et al. Degradable lipid nanoparticles with predictable in vivo siRNA delivery activity. Nat. Commun. 2014, 5:4277, doi: 10.1038/ncomms5277.
- 3) Young RE, Nelson KM, et al. Systematic development of ionizable lipid nanoparticles for placental mRNA delivery using a design of experiments approach. Bioact Mater. 2023 Dec 22;34:125-137. doi: 10.1016/j.bioactmat.2023.11.014.

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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