

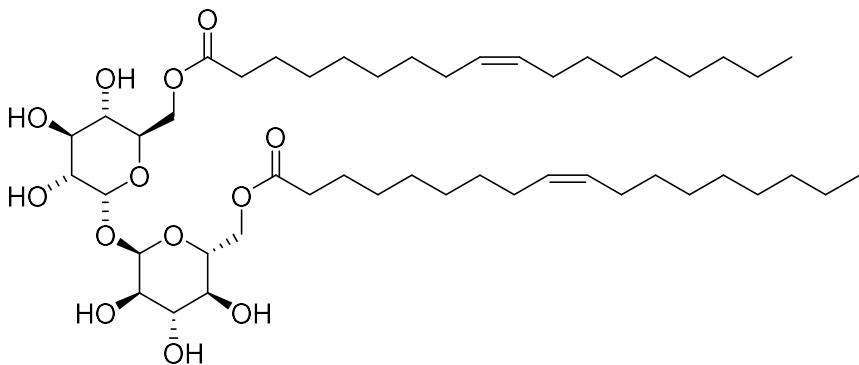
6,6'-trehalose dioleate

Catalog number: N-1025

Molecular Formula: C₄₉H₈₆O₁₃

MW: 871.20

CAS: n/a



Alternative Names: ((1R,2R,3S,4R,5S)-2,3,4-trihydroxy-5-(((2S,3R,4S,5S,6R)-3,4,5-trihydroxy-6-((oleoyloxy)methyl)tetrahydro-2H-pyran-2-yl)oxy)cyclohexyl)methyl oleate

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: 6,6'-trehalose dioleate is a glycolipid which can reduce toxicity when incorporated into lipid nanoparticles (LNPs). It can form hydrogen bonds with polar biomolecules, allowing the formation of a stable LNP structure by partially replacing the ionizable lipid. It can facilitate the development of safe mRNA vaccines with improved clinical safety.

References:

S. Bae et al, "A lipid nanoparticle platform incorporating trehalose glycolipid for exceptional mRNA vaccine safety" *Bioactive Materials*, 2024, 38:486-498

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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