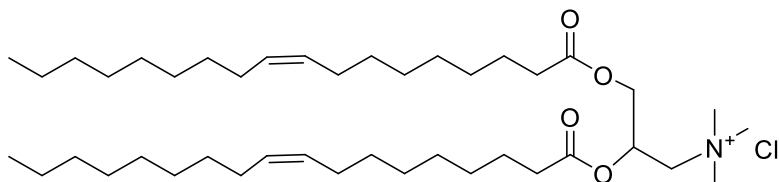


18:1 TAP (DOTAP)

Catalog number: N-1380



Molecular Formula: $C_{42}H_{80}NO_4 \cdot Cl$

MW: 698.54

CAS: 132172-61-3

Alternate Name: 1,2-*di*-(9*Z*-octadecenoyl)-3-trimethylammonium-propane (chloride salt); 1,2-dioleoyl-3-trimethylammonium-propane (chloride salt)

Solubility: Methanol, ethanol, DMSO, and dimethyl formamide

Storage and Handling: Dotap is stable for at least one year when stored as a solid, protected from moisture, and light at $-20^{\circ}C$. After reconstitution, solutions of Dotap should be stored at $-20^{\circ}C$ between uses.

Background: Dotap forms stable cationic liposomes in solution and can be used in the cell transfection of DNA, RNA, oligonucleotides, anionic proteins and small peptides.

References: 1) Simberg D. et al (2004). "DOTAP (and Other Cationic Lipids): Chemistry, Biophysics, and Transfection". *Critical Reviews in Therapeutic Drug Carrier Systems*. 21 (4): 257–317.

DOI: 10.1615/critrevtherdrugcarriersyst.v21.i4.10. 2) Hou X. et al (2021). "Lipid nanoparticles for mRNA delivery". *Nat Rev Mater* 6, 1078–1094. <https://doi.org/10.1038/s41578-021-00358-0>

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.

