

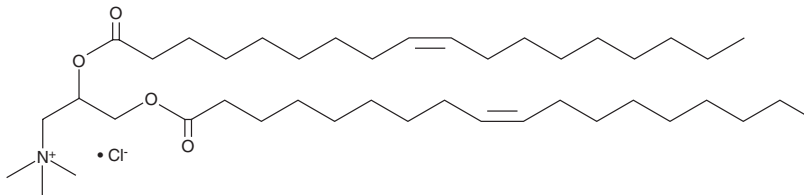
# PRODUCT INFORMATION



## 1,2-Dioleoyl-3-trimethylammoniumpropane (chloride)

Item No. 15110

**CAS Registry No.:** 132172-61-3  
**Formal Name:** N,N,N-trimethyl-2,3-bis[[[(9Z)-1-oxo-9-octadecenyl]oxy]-1-propanaminium, monochloride  
**Synonym:** DOTAP  
**MF:** C<sub>42</sub>H<sub>80</sub>NO<sub>4</sub> • Cl  
**FW:** 698.6  
**Purity:** ≥95%  
**Supplied as:** A crystalline solid  
**Storage:** -20°C  
**Stability:** ≥4 years



Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

### Laboratory Procedures

1,2-Dioleoyl-3-trimethylammoniumpropane (DOTAP) (chloride) is supplied as a crystalline solid. A stock solution may be made by dissolving the DOTAP (chloride) in the solvent of choice. DOTAP (chloride) is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide, which should be purged with an inert gas. The solubility of DOTAP (chloride) in these solvents is approximately 33, 0.5, and 5 mg/ml, respectively.

DOTAP (chloride) is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, DOTAP (chloride) should first be dissolved in ethanol and then diluted with the aqueous buffer of choice. DOTAP (chloride) has a solubility of approximately 0.5 mg/ml in a 1:1 solution of ethanol:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

### Description

DOTAP is a cationic liposome-forming compound used for transfection of DNA, RNA, and other negatively charged molecules into eukaryotic cells. It has been used in the composition of small unilamellar liposomes formulated as gene delivery vectors for gene therapy.<sup>1</sup>

### Reference

1. Xiong, F., Mi, Z., and Gu, N. Cationic liposomes as gene delivery system: Transfection efficiency and new application. *Pharmazie* **66**(3), 158-164 (2011).

#### WARNING

THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

#### SAFETY DATA

This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the complete Safety Data Sheet, which has been sent via email to your institution.

#### WARRANTY AND LIMITATION OF REMEDY

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