



Catalog Number: 14486

INTRODUCTION

DSTAP is a cationic lipid used in the transfection of negatively charged molecules into eukaryotic cells. Several analogues of TAP are available for structure-activity relationship studies.

SPECIFICATIONS:

Synonym(s): 1,2-distearoyl-3-trimethylammonium-propane chloride DSTAP Chloride; DSTAP Linear Formula: C₄₇H_{e4}NO₄Cl

CAS Number:	220609-41-6
Purity:	≥99%
Molecular Weight:	702.6
Appearance:	white powder
Storage:	-20°C

LIPOSOME SYNTHESIS PROTOCOL

MATERIALS:

- DSTAP Chloride
- Dry Nitrogen or Argon
- Purified H₂O
- Chloroform

EQUIPMENT:

- 5 mL Glass beaker
- Glass round bottom flask
- Rotary evaporator
- Sterile polystyrene storage tube
- Micropipette and tips (100 $\mu l)$
- Calibrated scale
- Laminar flow hood with vacuum

PREPARE STOCK SOLUTION:

- 1. Remove DSTAP from freezer (-20 °C) and thaw to room temperature
- 2. Weigh 10 mg of DSTAP into glass vial
- 3. Add 2 mL of chloroform to glass vial; agitate until dissolved
- 4. (Optional: Store stock solution at -20 °C under nitrogen or argon)

PREPARATION OF LIPID FILM:

- 1. Place stock solution in round bottom glass and remove solvent using a rotary evaporator
- 2. Evaporate chloroform with dry nitrogen flow in fume hood
- 3. Place vial in vacuum pump until lipid film is created (~2-3 hours)

SAFETY

See Safety Data Sheet



REHYDRATION AND LIPOSOME FORMATION:

- 1. Add 2 mL filtered H_2O to lipid film
- 2. Sonicate 5-20 minutes or to clarity
- 3. Store suspension in glass vial under nitrogen or argon at 4 °C until use, up to 3 months

ORDERING INFORMATION

Cat. #	Description
14486	DSTAP Chloride

Visit Polysciences.com any time to place an order.

Contact us at info@polysciences.com to learn about our cGMP grade DSTAP Chloride manufactured under 21 CFR part 210, 211.