

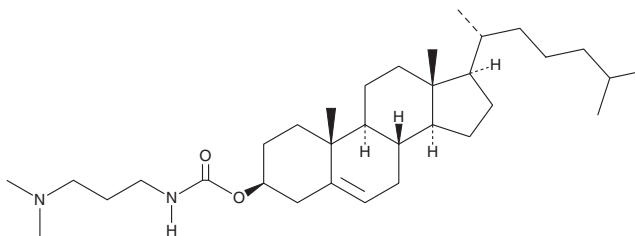
PRODUCT INFORMATION



DMPAC-Chol

Item No. 26583

CAS Registry No.: 184582-91-0
Formal Name: (3 β)-cholest-5-en-3-ol
3-[[3-(dimethylamino)propyl]carbamate]
Synonym: Chol-T
MF: C₃₃H₅₈N₂O₂
FW: 514.8
Purity: \geq 95%
Supplied as: A crystalline solid
Storage: -20°C
Stability: \geq 2 years



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

Laboratory Procedures

DMPAC-Chol is supplied as a crystalline solid. A stock solution may be made by dissolving the DMPAC-cholesterol in the solvent of choice. DMPAC-Chol is soluble in organic solvents such as ethanol and dimethyl formamide, which should be purged with an inert gas. The solubility of DMPAC-cholesterol in these solvents is approximately 10 mg/ml.

DMPAC-Chol is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, DMPAC-cholesterol should first be dissolved in ethanol and then diluted with the aqueous buffer of choice. DMPAC-Chol has a solubility of approximately 0.14 mg/ml in a 1:6 solution of ethanol:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

Description

DMPAC-Chol is a cationic cholesterol derivative that has been used in liposome formation for gene transfection.¹ Liposomes containing DMPAC-cholesterol bind to DNA in a band shift assay and protect against serum nuclease degradation of DNA when used at liposome:DNA ratios ranging from 2.5:1 to 10:1 w/w. DMPAC-Chol-containing liposomes also reduce viability of HepG2 cells by 63% when used at a concentration of 37.5 μ g/ml.

Reference

1. Kiso, N., Ariatti, M., and Moodley, T. A novel cationic cholesterol derivative, its formulation into liposomes, and the efficient transfection of the transformed human cell lines HepG2 and HeLa. *Drug Deliv.* **9**(3), 161-167 (2002).

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

Buyer agrees to purchase the material subject to Cayman's Terms and Conditions. Complete Terms and Conditions including Warranty and Limitation of Liability information can be found on our website.

Copyright Cayman Chemical Company, 01/22/2019

CAYMAN CHEMICAL

1180 EAST ELLSWORTH RD
ANN ARBOR, MI 48108 · USA

PHONE: [800] 364-9897
[734] 971-3335

FAX: [734] 971-3640

CUSTSERV@CAYMANCHEM.COM
WWW.CAYMANCHEM.COM