

Product Name: DC-Cholesterol hydrochloride

Catalog No.: 7176

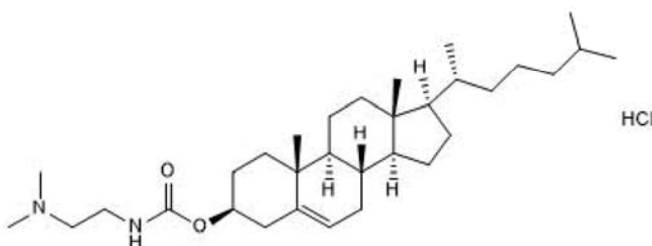
Batch No.: 1

CAS Number: 166023-21-8

IUPAC Name: (3β)-3-[N-[2-(Dimethylamino)ethyl]carbamate cholest-5-en-3-ol hydrochloride

1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula: C₃₂H₅₆N₂O₂.HCl
Batch Molecular Weight: 537.27
Physical Appearance: White solid
Solubility: DMSO to 5 mM with sonication
 ethanol to 20 mM
Storage: Store at -20°C
Batch Molecular Structure:



2. ANALYTICAL DATA

HPLC: Shows 98.2% purity
¹H NMR: Consistent with structure
Mass Spectrum: Consistent with structure

Microanalysis:

	Carbon	Hydrogen	Nitrogen	Chlorine
Theoretical	71.54	10.69	5.21	6.6
Found	70.72	10.62	5.18	6.98

Caution - Not Fully Tested • Research Use Only • Not For Human or Veterinary Use

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Description:

DC-Cholesterol hydrochloride is a cationic cholesterol derivative for use as a liposomal transfection reagent. Combines with the 'helper lipid' DOPE (Cat. No. 7175) after sonication or microfluidization to form unilamellar liposomes. Can be used in vitro and in vivo for transfer of nucleic acids, protein complexes, or other small molecule complexes into tissues, tumors and cells.

Physical and Chemical Properties:

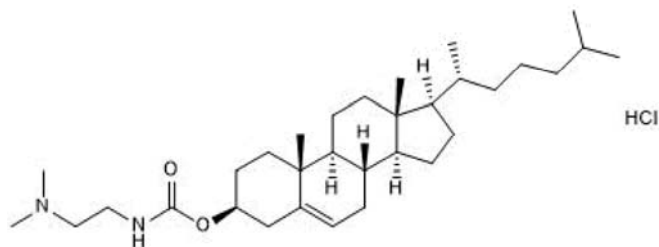
Batch Molecular Formula: C₃₂H₅₆N₂O₂.HCl

Batch Molecular Weight: 537.27

Physical Appearance: White solid

Minimum Purity: ≥95%

Batch Molecular Structure:



Storage: Store at -20°C

Solubility & Usage Info:

DMSO to 5 mM with sonication
ethanol to 20 mM

Stability and Solubility Advice:

Some solutions can be difficult to obtain and can be encouraged by rapid stirring, sonication or gentle warming (in a 45-60°C water bath).

Information concerning product stability, particularly in solution, has rarely been reported and in most cases we can only offer a general guide. Our standard recommendations are:

SOLIDS: Provided storage is as stated on the product label and the vial is kept tightly sealed, the product can be stored for up to 6 months from date of receipt.

SOLUTIONS: We recommend that stock solutions, once prepared, are stored aliquoted in tightly sealed vials at -20°C or below and used within 1 month. Wherever possible solutions should be made up and used on the same day.

References:

Li *et al* (1996) DC-Chol lipid system in gene transfer. *J.Control.Release* **39** 373.

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