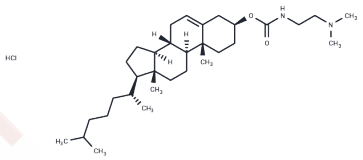
Data Sheet (Cat.No.T35941)

TargetMol

DC-Chol hydrochloride

Chemical Properties



CAS No. : 166023-21-8

Formula: C32H57ClN2O2

Molecular Weight: 537.26

Storage: Keep away from direct sunlight,Store at low temperature
Powder: -20°C for 3 years | In solvent: -80°C for 1 year
Actual storage temperature shall be subject to the COA.

Biological Description

Description	DC-Chol hydrochloride(DC-Cholesterol hydrochloride) inhibited the formation of Aβ40 fibrils under appropriate experimental conditions and significantly inhibited amyloid formation from oxidized hCT in a dose-dependent manner.DC-Chol hydrochloride induces an improved and balanced immunity, which could contribute to hepatitis B vaccine research.
Targets(IC50)	Beta Amyloid,IFNAR,Interleukin,Liposome

Solubility Information

Solubility	DMSO: 1.35 mg/mL (2.51 mM),Sonication is recommended. Methanol: 10 mg/mL (18.61 mM),Sonication is recommended. Ethanol: 20 mg/mL (37.23 mM),Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	1.8613 mL	9.3065 mL	18.613 mL
5 mM	0.3723 mL	1.8613 mL	3.7226 mL
10 mM	0.1861 mL	0.9306 mL	1.8613 mL
50 mM	0.0372 mL	0.1861 mL	0.3723 mL

Please select the appropriate solvent to prepare the stock solution, according to the solubility of the product in different solvents. Please use it as soon as possible.

Note: The dilution table applies only to solid products. For liquid products, please calculate the stock solution based on the stated concentration and/or density.

Reference

Esmail A Elbassal, et al. Effects of Charged Cholesterol Derivatives on Aβ40 Amyloid Formation. J Phys Chem B. 2016 Jan 14;120(1):59-68.
Richard Lantz, et al. Effects of disulfide bond and cholesterol derivatives on human calcitonin amyloid formation. Biopolymers. 2020 May;111(5):e23343.
Myschik J, et al. Immunostimulatory lipid implants containing Quil-A and DC-cholesterol. Int J Pharm. 2008 Nov 3; 363(1-2):91-8.
Chang SF, et al. The Impact of Lipid Types and Liposomal Formulations on Osteoblast Adiposity and Mineralization. Molecules. 2018 Jan 2;23(1):95.
López-Dávila V, et al. Efficacy of DOPE/DC-cholesterol liposomes and GCPQ micelles as AZD6244 nanocarriers in a 3D colorectal cancer in vitro model. Nanomedicine (Lond). 2016 Feb;11(4):331-44.