

## 7-Dehydrocholesterol

## Chemical Properties

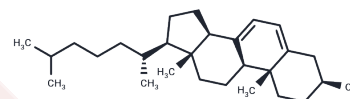
CAS No. : 434-16-2

Formula: C<sub>27</sub>H<sub>44</sub>O

Molecular Weight: 384.64

Storage: Store at low temperature, Keep away from moisture  
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	7-Dehydrocholesterol (Provitamin D3) down-regulates cholesterol biosynthesis in cultured Smith-Lemi-Opitz syndrome skin fibroblasts.
Targets(IC50)	Endogenous Metabolite
In vitro	7-Dehydrocholesterol, a biosynthetic precursor of cholesterol and vitamin D3, is found in high concentrations in the skin. Upon UV irradiation, it converts to pre-vitamin D3 and is also exposed to exogenous radical sources and oxygen.

## Solubility Information

Solubility	DMSO: 11 mg/mL (28.6 mM), Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)
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## Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	2.5998 mL	12.9992 mL	25.9983 mL
5 mM	0.520 mL	2.5998 mL	5.1997 mL
10 mM	0.260 mL	1.2999 mL	2.5998 mL
50 mM	0.052 mL	0.260 mL	0.520 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

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- Muzzin K B, Harper L F. Smith-Lemli-Opitz syndrome: a review, case report and dental implications[J]. Special Care in Dentistry, 2010, 23(1):22-27.
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