

## 7-Ketocholesterol

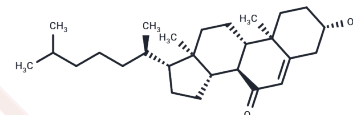
## Chemical Properties

CAS No. : 566-28-9

Formula: C<sub>27</sub>H<sub>44</sub>O<sub>2</sub>

Molecular Weight: 400.65

Storage: Store at low temperature, Keep away from direct sunlight  
 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-Ketocholesterol is a metabolite of Cholesterol
Targets(IC50)	Others,Endogenous Metabolite,p38 MAPK
In vivo	7-ketocholesterol (7KC), in patients with cardiovascular disease and diabetes, and this process is thought to mediate pathological inflammation.?7KC induces a dose-dependent loss of cell viability and an increase in apoptosis and necrosis in the endothelial cells.?A relocalization of the tight junction proteins, zonula occludens-1 (ZO-1) and claudin-5, towards the nucleus of the cells was also observed.?These effects were significantly attenuated by ET. In addition, 7KC induces marked increases in the mRNA expression of pro-inflammatory cytokines, IL-1 $\beta$ IL-6, IL-8, TNF- $\alpha$ and cyclooxygenase-2 (COX2), as well as COX2 enzymatic activity, and these were

## Solubility Information

Solubility	DMSO: < 4.01 mg/mL (10 mM),Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)
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### Preparing Stock Solutions

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	1mg	5mg	10mg
1 mM	2.4959 mL	12.4797 mL	24.9594 mL
5 mM	0.4992 mL	2.4959 mL	4.9919 mL
10 mM	0.2496 mL	1.248 mL	2.4959 mL
50 mM	0.0499 mL	0.2496 mL	0.4992 mL

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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

Anderson A , Campo A , Fulton E , et al. 7-Ketocholesterol in disease and aging[J]. Redox Biology, 29.  
SS Koh, Ooi C Y , Lui M Y , et al. Effect of Ergothioneine on 7-Ketocholesterol-Induced Endothelial Injury[J].  
NeuroMolecular Medicine, 2020:1-15.

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