Proteins

Inhibitors

7-Ketocholesterol

Cat. No.: HY-113342 CAS No.: 566-28-9 Molecular Formula: $C_{27}H_{44}O_2$ Molecular Weight: 400.64

Target: **Endogenous Metabolite** Pathway: Metabolic Enzyme/Protease

Storage: -20°C, protect from light

* In solvent: -80°C, 6 months; -20°C, 1 month (protect from light)

Product Data Sheet

SOLVENT & SOLUBILITY

In Vitro

DMSO: 6.25 mg/mL (15.60 mM; ultrasonic and warming and heat to 60°C)

Preparing Stock Solutions	Solvent Mass Concentration	1 mg	5 mg	10 mg
	1 mM	2.4960 mL	12.4800 mL	24.9601 mL
	5 mM	0.4992 mL	2.4960 mL	4.9920 mL
	10 mM	0.2496 mL	1.2480 mL	2.4960 mL

Please refer to the solubility information to select the appropriate solvent.

BIOLOGICAL ACTIVITY

Description

7-Ketocholesterol, toxic oxysterol, inhibits the rate-limiting step in bile acid biosynthesis cholesterol 7 alpha-hydroxylase, as well as strongly inhibiting HMG-CoA reductase (the rate-limiting enzyme in cholesterol biosynthesis). 7-Ketocholesterol induces cell apoptosis^[1].

IC₅₀ & Target

Human Endogenous Metabolite

REFERENCES

[1]. M A Lyons, et al. 7-Ketocholesterol. Int J Biochem Cell Biol. Mar-Apr 1999;31(3-4):369-75.

[2]. Amelia Anderson, et al. 7-Ketocholesterol in disease and aging. Redox Biol. 2020 Jan;29:101380.

 $\label{lem:caution:Product} \textbf{Caution: Product has not been fully validated for medical applications. For research use only.}$

Tel: 609-228-6898 Fax: 609-228-5909

E-mail: tech@MedChemExpress.com

Address: 1 Deer Park Dr, Suite Q, Monmouth Junction, NJ 08852, USA

Page 2 of 2 www.MedChemExpress.com