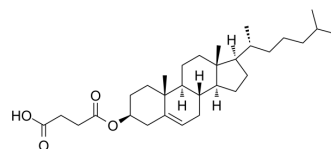


## Cholesteryl hemisuccinate

<b>Cat. No.:</b>	HY-W010800		
<b>CAS No.:</b>	1510-21-0		
<b>Molecular Formula:</b>	C <sub>31</sub> H <sub>50</sub> O <sub>4</sub>		
<b>Molecular Weight:</b>	486.73		
<b>Target:</b>	Topoisomerase; DNA/RNA Synthesis; Apoptosis; Necroptosis		
<b>Pathway:</b>	Cell Cycle/DNA Damage; Apoptosis		
<b>Storage:</b>	Powder	-20°C	3 years
		4°C	2 years
	In solvent	-80°C	6 months
		-20°C	1 month



### SOLVENT & SOLUBILITY

#### In Vitro

Ethanol : 25 mg/mL (51.36 mM; Need ultrasonic)  
DMSO : 10 mg/mL (20.55 mM; Need ultrasonic)

Preparing Stock Solutions	Solvent Concentration	Mass		
		1 mg	5 mg	10 mg
	1 mM	2.0545 mL	10.2726 mL	20.5453 mL
	5 mM	0.4109 mL	2.0545 mL	4.1091 mL
	10 mM	0.2055 mL	1.0273 mL	2.0545 mL

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

#### In Vivo

1. Add each solvent one by one: 10% EtOH >> 90% corn oil  
Solubility: ≥ 2.5 mg/mL (5.14 mM); Clear solution

### BIOLOGICAL ACTIVITY

#### Description

Cholesteryl hemisuccinate is a with hepatoprotective an anticancer activity. Cholesteryl hemisuccinate inhibits Acetaminophen (AAP, HY-66005) hepatotoxicity, and prevents AAP-induced hepatic apoptosis and necrosis. Cholesteryl hemisuccinate inhibits DNA polymerase and DNA topoisomerase to inhibit DNA replication and repair and cell division. Thus, Cholesteryl hemisuccinate inhibits tumor growth<sup>[1][2]</sup>.

#### In Vivo

Cholesteryl hemisuccinate (100 mg/kg; ip; single dose before AAP) abrogates histological and biochemical diagnostics of both apoptosis and necrosis induced by AAP (350-500 mg/kg; ip; single dose) in ICR mice (CD-1)<sup>[1]</sup>. MCE has not independently confirmed the accuracy of these methods. They are for reference only.

### REFERENCES

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[1]. Ray SD, et al. Protection of acetaminophen-induced hepatocellular apoptosis and necrosis by cholesteryl hemisuccinate pretreatment. J Pharmacol Exp Ther. 1996 Dec;279(3):1470-83.

[2]. Varshosaz J, et al. Folated synperonic-cholesteryl hemisuccinate polymeric micelles for the targeted delivery of docetaxel in melanoma. Biomed Res Int. 2015;2015:746093.

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**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](mailto:tech@MedChemExpress.com)

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