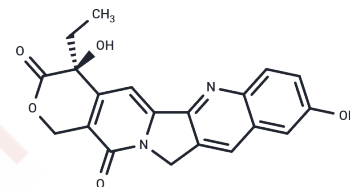


## (S)-10-Hydroxycamptothecin

## Chemical Properties

CAS No. :	19685-09-7
Formula:	C <sub>20</sub> H <sub>16</sub> N <sub>2</sub> O <sub>5</sub>
Molecular Weight:	364.35
Storage:	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	(S)-10-Hydroxycamptothecin (10-HCPT) is a DNA topoisomerase I inhibitor used as a clinical therapeutic agent against hepatoma.
Targets(IC50)	Apoptosis,Topoisomerase
In vitro	In the CAM model, 10-Hydroxycamptothecin (25 nM) inhibits angiogenesis in a concentration-dependent manner. In mice carrying Colo 205 xenografts, oral administration of 10-Hydroxycamptothecin (2.5-7.5 mg/kg) every two days significantly suppresses tumor cell growth.
In vivo	(S)-10-Hydroxycamptothecin inhibits cell growth in BT-20 cells (IC <sub>50</sub> =34.3 nM) and MDA-231 cells (IC <sub>50</sub> =7.27 nM), demonstrating its efficacy. It also induces the formation of cleavable complexes mediated by human topoisomerase I in pBR322 plasmid DNA (EC <sub>50</sub> =0.35 μM). Additionally, in human microvascular endothelial cells (HMEC), (S)-10-Hydroxycamptothecin dose-dependently inhibits cell growth (IC <sub>50</sub> =0.31 μM), significantly hampers HMEC migration (IC <sub>50</sub> =0.63 μM), and impedes angiogenesis (IC <sub>50</sub> =0.96 μM).
Cell Research	Cells are exposed to various concentrations of 10-Hydroxycamptothecin for 72 hours. Cell growth is monitored by the standard MTT assay.(Only for Reference)

## Solubility Information

Solubility	DMSO: 26 mg/mL (71.36 mM),Sonication is recommended. H <sub>2</sub> O: < 1 mg/mL (insoluble or slightly soluble), Ethanol: < 1 mg/mL (insoluble or slightly soluble), (< 1 mg/ml refers to the product slightly soluble or insoluble)
------------	--

### Preparing Stock Solutions

---

	1mg	5mg	10mg
1 mM	2.7446 mL	13.7231 mL	27.4461 mL
5 mM	0.5489 mL	2.7446 mL	5.4892 mL
10 mM	0.2745 mL	1.3723 mL	2.7446 mL
50 mM	0.0549 mL	0.2745 mL	0.5489 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

- Ling YH, et al. Cancer Biochem Biophys, 1990, 11(1), 23-30.
- Vladu B, et al. Mol Pharmacol, 2000, 57(2), 243-251.
- Xiao D, et al. Life Sci, 2001, 69(14), 1619-1628.
- Ping YH, et al. Oncol Rep, 2006, 15(5), 1273-1279.

**Inhibitor · Natural Compounds · Compound Libraries · Recombinant Proteins**

This product is for Research Use Only · Not for Human or Veterinary or Therapeutic Use

Tel:781-999-4286 E\_mail:info@targetmol.com Address:34 Washington Street,Wellesley Hills,MA 02481