Product Data Sheet

Camptothecin-20(S)-O-propionate

Cat. No.: HY-114668 CAS No.: 194414-69-2 Molecular Formula: $C_{23}H_{20}N_{2}O_{5}$ Molecular Weight: 404.42

Target: Topoisomerase

Pathway: Cell Cycle/DNA Damage

-20°C Storage: Powder 3 years

2 years

-80°C In solvent 6 months

> -20°C 1 month

SOLVENT & SOLUBILITY

In Vitro

DMSO: 9.09 mg/mL (22.48 mM; Need ultrasonic)

Preparing Stock Solutions	Solvent Mass Concentration	1 mg	5 mg	10 mg
	1 mM	2.4727 mL	12.3634 mL	24.7268 mL
	5 mM	0.4945 mL	2.4727 mL	4.9454 mL
	10 mM	0.2473 mL	1.2363 mL	2.4727 mL

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

BIOLOGICAL ACTIVITY

Description Camptothecin-20(S)-O-propionate (CZ48), the C20-propionate ester of CPT, is a highly effective anticancer agent.

Camptothecin-20(S)-O-propionate (CZ48) is a topoisomerase-I inhibitor^{[1][2][3]}.

In Vivo Camptothecin-20(S)-O-propionate (CZ48, gavage, 100 to 2000 mg/kg/day) exhibits anti-tumor activity in CLO-breast carcinoma (100 mg/kg) and PC3-prostate carcinoma (1000 mg/kg) models in mice^[3].

MCE has not independently confirmed the accuracy of these methods. They are for reference only.

A tumor xenograft growing in a nude mouse (size, \(\mathbb{Z} \)1 cm³)[3]. Animal Model: Dosage: 100-1000 mg/kg/day. Administration: Oral gavage, for 2, 4 and 6 days, respectively. Exhibited anti-tumor effect. Result:

REFERENCES

[1]. Zhisong Cao, et al. Crystalline camptothecin-20(S)-O-propionate hydrate: a novel anticancer agent with strong activity against 19 human tumor xenografts. Cancer Res. 2009 Jun 1;69(11):4742-9.

[2]. Xing Liu, et al. Correlation between the sensitivity of tumors to treatment with CZ48 and local concentrations of the active metabolite CPT within the tumors. Biomed Rep. 2013 Mar;1(2):202-206.

Caution: Product has not been fully validated for medical applications. For research use only.

Tel: 609-228-6898

Fax: 609-228-5909

 $\hbox{E-mail: } tech @ Med Chem Express.com$

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