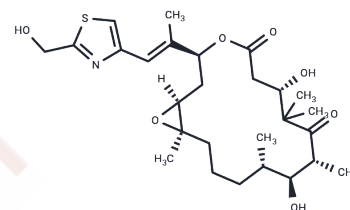


Epothilone F

Chemical Properties

CAS No. :	208518-52-9
Formula:	C ₂₇ H ₄₁ N ₁ O ₇ S
Molecular Weight:	523.68
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	Epothilone F is a derivative or analogue of Epothilone D. Epothilone F is also an active metabolite of Epothilone D. In molecule of Epothilone F, a hydroxymethyl group is on the thiazole ring. Like taxanes, Epothilone F prevents cancer cells from dividing by interfering with tubulin. Early studies in cancer cell lines and in human cancer patients indicate superior efficacy to the taxanes. Epothilone's mechanism of action is similar to taxanes, but their chemical structure is simpler. Due to its better water solubility, cremophors (solubilizing agents used for paclitaxel which can affect cardiac function and cause severe hypersensitivity) are not needed.
Targets(IC50)	Others, Microtubule Associated

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	1.9096 mL	9.5478 mL	19.0956 mL
5 mM	0.3819 mL	1.9096 mL	3.8191 mL
10 mM	0.191 mL	0.9548 mL	1.9096 mL
50 mM	0.0382 mL	0.191 mL	0.3819 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

- Nayeem A, Chiang SJ, Liu SW, Sun Y, You L, Basch J. Engineering enzymes for improved catalytic efficiency: a computational study of site mutagenesis in epothilone-B hydroxylase. *Protein Eng Des Sel.* 2009 Apr;22(4):257-66. doi: 10.1093/protein/gzn081. Epub 2009 Jan 28. PubMed PMID: 19179341.
- Basch J, Chiang SJ. Cloning and expression of a cytochrome P450 hydroxylase gene from *Amycolatopsis orientalis*: hydroxylation of epothilone B for the production of epothilone F. *J Ind Microbiol Biotechnol.* 2007 Feb;34(2):171-6. Epub 2006 Sep 14. Erratum in: *J Ind Microbiol Biotechnol.* 2007 Feb;34(2):177. PubMed PMID: 16972046.
- Mutka SC, Carney JR, Liu Y, Kennedy J. Heterologous production of epothilone C and D in *Escherichia coli*. *Biochemistry.* 2006 Jan 31;45(4):1321-30. PubMed PMID: 16430229.
- Hardt IH, Steinmetz H, Gerth K, Sasse F, Reichenbach H, Häßfle G. New natural epothilones from *Sorangium cellulosum*, strains So ce90/B2 and So ce90/D13: isolation, structure elucidation, and SAR studies. *J Nat Prod.* 2001 Jul;64(7):847-56. PubMed PMID: 11473410.

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