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Product Information

Product ID E6356

CAS No. 189453-10-9

Chemical Name

Synonym

Formula C₂₇H₄₁NO₅S

Formula Wt. 491.68

Melting Point

Purity ≥98%

Solubility

νOH OH

Bulk quanitites available upon request

Product ID Size E6356 1 mg E6356 5 mg E6356 10 mg E6356 25 mg

Store Temp -20°C

Ship Temp Ambient

Description Epothilone is an anticancer chemotherapeutic that acts as an anti-mitotic compound; it binds the taxane pocket of β-tubulin, using side chains to induce formation of a short helix and preventing microtubule depolymerization. Epothilone displays activity against lung cancer and prostate cancer in clinical trials and may show benefit in treatment of neurodegenerative diseases such as Alzheimer's disease. Typically, the degree of chemotherapeutic activity of the three epothilone subtypes follows the alphabet, where Epo A> Epo B> Epo D.

References Prota AE, Bargsten K, Zurwerra D, et al. Molecular mechanism of action of microtubule-stabilizing anticancer agents. Science. 2013 Feb 1;339(6119):587-90. PMID: 23287720.

> Entwistle RA, Rizk RS, Cheng DM, et al. Differentiating between models of epothilone binding to microtubules using tubulin mutagenesis, cytotoxicity, and molecular modeling. ChemMedChem. 2012 Sep;7(9):1580-6. PMID: 22807375.

> Edelman MJ, Shvartsbeyn M. Epothilones in development for non--small-cell lung cancer: novel anti-tubulin agents with the potential to overcome taxane resistance. Clin Lung Cancer. 2012 May;13(3):171-80. PMID: 22133291

Kelly WK. Epothilones in prostate cancer. Urol Oncol. 2011 Jul-Aug; 29(4): 358-65. PMID: 19914096.

Lee JJ, Kelly WK. Epothilones: tubulin polymerization as a novel target for prostate cancer therapy. Nat Clin Pract Oncol. 2009 Feb;6(2):85-92. PMID: 19048010.

Caution: This product is intended for laboratory and research use only. It is not for human or drug use.