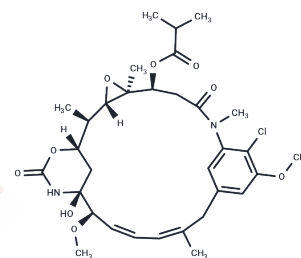


Ansamitocin p-3

Chemical Properties

CAS No. : 66584-72-3
 Formula: C₃₂H₄₃ClN₂O₉
 Molecular Weight: 635.14
 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	Ansamitocin p-3 (Maytansinol isobutyrate) is an inhibitor of microtubule with IC ₅₀ of 3.4 μM for tubulin polymerization.
Targets(IC ₅₀)	Microtubule Associated, Antibacterial, Antibiotic, ADC Cytotoxin
In vitro	Ansamitocin p-3 inhibits the proliferation in a concentration-dependent manner with IC ₅₀ s of 20, 50, 140, and 150 pM for MCF-7, HeLa, EMT-6/AR1, and MDA-MB-231 cells in culture, respectively. Ansamitocin P3 binds to purified tubulin (K _d = 1.3 μM)[1].

Solubility Information

Solubility	DMSO: 90 mg/mL (141.7 mM), Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)
In vivo Formulation	10% DMSO+40% PEG300+5% Tween 80+45% Saline: 3.3 mg/mL (5.2 mM), Sonication is recommended. <i>Please add the solvents sequentially, clarifying the solution as much as possible before adding the next one. Dissolve by heating and/or sonication if necessary. Working solution is recommended to be prepared and used immediately. The formulation provided above is for reference purposes only. In vivo formulations may vary and should be modified based on specific experimental conditions.</i>

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	1.5745 mL	7.8723 mL	15.7446 mL
5 mM	0.3149 mL	1.5745 mL	3.1489 mL
10 mM	0.1574 mL	0.7872 mL	1.5745 mL
50 mM	0.0315 mL	0.1574 mL	0.3149 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

Kiso T, et al. Screening for microtubule-disrupting antifungal agents by using a mitotic-arrest mutant of *Aspergillus nidulans* and novel action of phenylalanine derivatives accompanying tubulin loss. *Antimicrob Agents Chemother.* 2004 May;48(5):1739-48

Venghateri JB, et al. Ansamitocin P3 depolymerizes microtubules and induces apoptosis by binding to tubulin at the vinblastine site. *PLoS One.* 2013 Oct 4;8(10):e75182.

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