Product Data Sheet

Product Name: Tubulysin M
Cat. No.: GC37844

Chemical Properties

Cas. No.	936691-46-2		
SMILES	O=C(N[C@@H]([C@@H](C)CC)C(N(C)[C@@H](C(C)C)C[C@@H](OC(C)=O)C1=NC(C(N[C@@H](CC2=CC=CC=C2)C[C@H](C)C(O)=O)=O)=CS1)=O)[C@@H]3N(C)CCCC3		
Formula	$C_{38}H_{57}N_5O_7S$	M.Wt	727.95
Solubility	Soluble in DMSO	Storage	Store at -20°C
General tips	For obtaining a higher solubility , please warm the tube at 37 ℃ and shake it in the ultrasonic bath for a while.Stock solution can be stored below -20℃ for several months.		
Shipping Condition	Evaluation sample solution : ship with blue ice All other available size: ship with RT , or blue ice upon request.		
Structure	Tubulysin M		

Background

Tubulysin M is a highly cytotoxic peptide isolated from the myxobacterial species Archangium geophyra and Angiococcus disciformis[1]. Tubulysin displays extremely potent cytotoxic activity in mammalian cells, including multidrug-resistant cell lines, with IC50 values in the lower nanomolar range[2]. Tubulysin M is a cytotoxic activity tubulysin which inhibits tubulin polymerization and leads to cell cycle arrest and apoptosis[3].

[1]. Wang Y, et al. Structural Insights into the Pharmacophore of Vinca Domain Inhibitors of Microtubules. Mol Pharmacol. 2016 Feb;89(2):233-42. [2]. Kubicek K, et al. The tubulin-bound structure of the antimitotic drug tubulysin. Angew Chem Int Ed Engl. 2010 Jun 28;49(28):4809-12. [3]. Vlahov IR, et al. Acid mediated formation of an N-acyliminium ion from tubulysins: a new methodology for the synthesis of natural tubulysins and their analogs. Bioorg Med Chem Lett. 2011 Nov 15;21(22):6778-81.

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