Data Sheet (Cat.No.T13227)



Tubulin inhibitor 1

Chemical Properties

CAS No.: 2237054-53-2

Formula: C21H24N2O4

Molecular Weight: 368.43

Appearance: no data available

Storage: Powder: -20°C for 3 years | In solvent: -80°C for 1 year

Biological Description

Description	Tubulin inhibitor 1 is an inhibitor of tubulin, inhibits tubulin polymerization, with potent anti-tumor activity, induces cellular apoptosis causes and cellular mitotic arrest in the G2/M phase.
Targets(IC50)	Microtubule Associated
In vitro	Tubulin inhibitor 1 is an inhibitor of tubulin. Tubulin inhibitor 1 has potent antiproliferative activity against SK-OV-3, MDA-MB-231, HeLa, A549, CT26 and MCF-7 cells (IC50s of 16.7 ± 3.0 , 31.4 ± 0.7 , 32.8 ± 2.9 , 67.0 ± 0.8 , 58.0 ± 2.4 and 35.4 ± 5.6 nM, respectively). Tubulin inhibitor 1 (40, 80, and 160 nM, 48 hours) markedly causes cellular mitotic arrest in the G2/M phase, induces apoptosis in SK-OV-3 cells.
In vivo	In Balb/c nude mice bearing SK-OV-3 cells, Tubulin inhibitor 1 (50 mg/kg, i.p.,) treatment every two days three times for 20-25 days is well tolerated, significantly reduces tumour growth.

Solubility Information

Solubility	DMSO: 125 mg/mL (339.28 mM), Sonication is recommended.	
Solubility		
	(< 1 mg/ml refers to the product slightly soluble or insoluble)	

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	2.7142 mL	13.5711 mL	27.1422 mL
5 mM	0.5428 mL	2.7142 mL	5.4284 mL
10 mM	0.2714 mL	1.3571 mL	2.7142 mL
50 mM	0.0543 mL	0.2714 mL	0.5428 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.

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Reference

Lai Q, et al. Design, synthesis and biological evaluation of a novel tubulin inhibitor 7a3. Eur J Med Chem. 2018 Aug 5;156:162-179.

Inhibitor · Natural Compounds · Compound Libraries · Recombinant Proteins

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