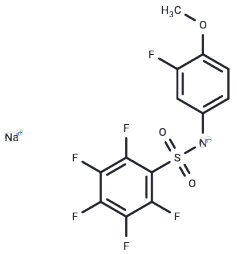
Data Sheet (Cat.No.T41342)

TargetMol

Batabulin sodium

Chemical Properties



CAS No. : 195533-98-3

Formula: C13H6F6NNaO3S

Molecular Weight: 393.24

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	Batabulin sodium (T138067 sodium) is an antitumor agent that covalently and selectively modifies β-tubulin isotypes, disrupting microtubule polymerization, affecting cell morphology, leading to cell-cycle arrest, and ultimately inducing apoptotic cell death [1].
Targets(IC50)	Apoptosis,Others,Microtubule Associated
In vitro	Treatment with Batabulin (T138067; 30-300 nM; 24-48 hours) in MCF7 cells results in cell-cycle arrest at the G2/M boundary, evidenced by 25-30% of cells displaying tetraploid (4n) DNA content, and induces apoptosis, with 25-30% of cells becoming apoptotic within 24-48 hours, and 50-80% after 48-hour exposure to 100 nM. Batabulin selectively and covalently binds to the β1, β2, and β4 isotypes of β-tubulin at the conserved Cys-239 residue, disrupting microtubule polymerization, leading to cytoskeletal collapse, altered cell shape, and increased chromosomal ploidy. Cell cycle and apoptosis analyses further substantiate these effects, highlighting Batabulin's potential mechanism of action through perturbation of the cell cycle and induction of apoptosis in MCF7 cells [1].
In vivo	Batabulin treatment (T138067; 40 mg/kg; intraperitoneal injection; once per week on days 5, 12, and 19) significantly impaired the growth of drug-sensitive CCRF-CEM tumors in a study involving male athymic nude mice (nu/nu; 6-8 weeks old, 20-25 g) that were injected with CCRF-CEM cells [1]. The study utilized a dosage of 40 mg/kg administered through intraperitoneal injection once per week on specified days, leading to the observed result of hindered tumor growth.

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	2.543 mL	12.7149 mL	25.4298 mL
5 mM	0.5086 mL	2.543 mL	5.086 mL
10 mM	0.2543 mL	1.2715 mL	2.543 mL
50 mM	0.0509 mL	0.2543 mL	0.5086 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.