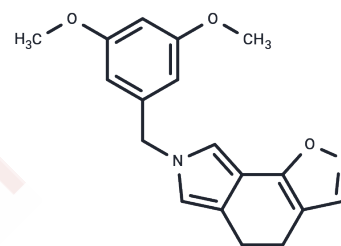


Tubulin polymerization-IN-36

Chemical Properties

CAS No. :	2011784-91-9
Formula:	C ₁₈ H ₁₈ N ₂ O ₃
Molecular Weight:	310.35
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	Tubulin polymerization-IN-36 is able to be used in cancer research, for example, lymphomas. Tubulin polymerization-IN-36 binds to the colchicine site of tubulin and inhibits colchicine binding, that is an inhibitor of tubulin polymerization with IC ₅₀ of 2.8 μM[1].
Targets(IC ₅₀)	Others, Microtubule Associated
In vitro	Tubulin polymerization-IN-36 (compound 2e) exhibits notable biological activity by reducing lymphoma cell proliferation to below 50% at a concentration of 1 μM over 72 hours and demonstrating cytotoxicity against MCF-7 cells with an IC ₅₀ of 0.29 μM. It induces apoptosis and arrests VL51 and MINO cells in the G ₂ /M phase at concentrations between 50 and 500 nM over 24 to 72 hours. Additionally, it inhibits colchicine's tubulin binding by 88% at 5 μM. Cell proliferation assays on VL51, MINO, HBL1, and SU-DHL-10 cell lines over 72 hours with concentrations up to 10 μM result in 38%, 0.8%, 7.1%, and 30.5% proliferation at 1 μM, respectively, with IC ₅₀ values from 0.02 to 0.04 μM. Cell cycle analysis confirms its mechanism by arresting VL51 and MINO cells in the G ₂ /M phase at 50 and 500 nM.

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	3.2222 mL	16.1108 mL	32.2217 mL
5 mM	0.6444 mL	3.2222 mL	6.4443 mL
10 mM	0.3222 mL	1.6111 mL	3.2222 mL
50 mM	0.0644 mL	0.3222 mL	0.6444 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.

Inhibitor · Natural Compounds · Compound Libraries · Recombinant Proteins

This product is for Research Use Only · Not for Human or Veterinary or Therapeutic Use

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