

Vinflunine ditartrate

Chemical Properties

CAS No. :	194468-36-5
Formula:	C49H60F2N4O14
Molecular Weight:	967.03
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	Vinflunine ditartrate, a fluorinated microtubule inhibitor and member of the Vinca alkaloids family, exhibits anti-angiogenic, vascular-disrupting, and anti-metastatic properties. It presents a potential avenue for studying transitional cell carcinoma of the urothelial tract, non-small cell lung cancer, and breast carcinoma[1][2].
Targets(IC50)	Others
In vitro	Vinflunine (0.01-10 μM ; 45 min) rapidly alters endothelial cell morphology, causing retraction and rounding[2]. Within 1 hour at the same concentrations, it disrupts capillary-like structure formation and inhibits motility, with an IC50 of 0.71 μM [2]. Over 1 to 72 hours, Vinflunine (0.001-10 μM) effectively suppresses endothelial cell proliferation in vitro[2].
In vivo	Vinflunine (0.08-20 mg/kg; i.v.) reduces the number of experimental liver metastases by human LS174T colon cancer cells. Vinflunine (0.63-5 mg/kg; i.v. before and 2 days after Matrigel implantation) inhibits the bFGF-induced angiogenic response in mice in a dose-dependent manner. [Animal Model: Female athymic nude mice (BALB/c/Ola/Hsd-nu) implanted with LS174T cells][2].

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	1.0341 mL	5.1705 mL	10.3409 mL
5 mM	0.2068 mL	1.0341 mL	2.0682 mL
10 mM	0.1034 mL	0.517 mL	1.0341 mL
50 mM	0.0207 mL	0.1034 mL	0.2068 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

Bennouna J, et, al. Vinflunine: a new microtubule inhibitor agent. Clin Cancer Res. 2008 Mar 15;14(6):1625-32.
Kruczynski A, et, al. Anti-angiogenic, vascular-disrupting and anti-metastatic activities of vinflunine, the latest vinca alkaloid in clinical development. Eur J Cancer. 2006 Nov;42(16):2821-32.

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