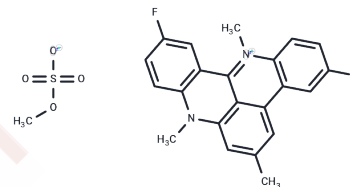


RHPS4

Chemical Properties

CAS No. : 390362-78-4
 Formula: C₂₂H₁₇F₂N₂·CH₃O₄S
 Molecular Weight: 458.48
 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	RHPS4 (RHPS 4 methosulfate) is a potent inhibitor of Telomerase at submicromolar.
Targets(IC50)	Apoptosis, Telomerase
In vitro	CP 673451 is a selective inhibitor of PDGFR α / β with IC ₅₀ of 10 nM/1 nM, exhibits >450-fold selectivity over other angiogenic receptors. In glioblastoma tumors, CP-673451 (33 mg/kg) provides >50% inhibition of PDGFR- β receptor for 4 hours corresponding to an EC ₅₀ of 120 ng/mL in plasma at C _{max} . In a sponge angiogenesis model, CP-673451 inhibits 70% of PDGF-BB-stimulated angiogenesis at a dose of 3 mg/kg (q.d. \times 5, p.o., corresponding to 5.5 ng/mL at C _{max}).[1] CP-673451 decreases cell proliferation rate through mechanisms involving reduced phosphorylation of GSK-3 α and GSK-3 β . In both RD and RUCH2 cultures, CP-673451 impairs rhabdosphere-forming capacity and cell differentiation, causes increased senescence. [2]

Solubility Information

Solubility	DMSO: 4.9 mg/mL (10.69 mM), Sonication is recommended. H ₂ O: < 1 mg/mL (insoluble or slightly soluble), Ethanol: < 1 mg/mL (insoluble or slightly soluble), (< 1 mg/ml refers to the product slightly soluble or insoluble)
In vivo Formulation	10% DMSO+90% Saline: 0.49 mg/mL (1.07 mM), Suspension. <i>Please add the solvents sequentially, clarifying the solution as much as possible before adding the next one. Dissolve by heating and/or sonication if necessary. Working solution is recommended to be prepared and used immediately. The formulation provided above is for reference purposes only. In vivo formulations may vary and should be modified based on specific experimental conditions.</i>

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	2.1811 mL	10.9056 mL	21.8112 mL
5 mM	0.4362 mL	2.1811 mL	4.3622 mL
10 mM	0.2181 mL	1.0906 mL	2.1811 mL
50 mM	0.0436 mL	0.2181 mL	0.4362 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

Phatak P, et al. Br J Cancer. 2007, 96(8):1223-33.

Wang Z, Deng J, Umer M, et al. RHPS4 shifted the conformation ensemble equilibrium of Tel24 by preferentially stabilizing the (3+ 1) hybrid-2 conformation. RSC Advances. 2022, 12(40): 26011-26015.

Salvati E, et al. J Clin Invest. 2007, 117(11):3236-47.

Gao C, Deng J, Anwar N, et al. Molecular crowding promotes the aggregation of parallel structured G-quadruplexes. International Journal of Biological Macromolecules. 2023: 124442.

Inhibitor · Natural Compounds · Compound Libraries · Recombinant Proteins

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

Tel: 781-999-4286 E_mail: info@targetmol.com Address: 34 Washington Street, Wellesley Hills, MA 02481