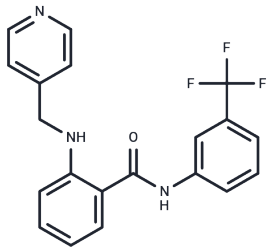
Data Sheet (Cat.No.T21593)

TargetMol

AAL-993

Chemical Properties



CAS No. : 269390-77-4

Formula: C20H16F3N3O

Molecular Weight: 371.36

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	AAL-993 is a potent VEGFR inhibitor with IC50s of 130 nM, 23 nM and 18 nM for VEGFR1, VEGFR2 and VEGFR3, respectively. AAL993 has a weak inhibitory effect on other tyrosine kinases. AAL993 also shows potent antiangiogenic and antitumor activities.
Targets(IC50)	VEGFR
In vitro	AAL993 suppressed HIF-1α expression through the inhibition of ERK without affecting Akt phosphorylation[1].
In vivo	AAL993 (24-100 mg/kg; p.o.) inhibited both the growth of the primary tumor as well as the formation of spontaneous peripheral metastases in B16 melanoma xenograft model [2]. AAL993 potently inhibited VEGF-induced angiogenesis with an ED50 value of 7 mg/kg in an implant model[2].

Solubility Information

Solubility	DMSO: 55 mg/mL (148.1 mM),Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)
In vivo Formulation	10% DMSO+40% PEG300+5% Tween 80+45% Saline: 2 mg/mL (5.39 mM),Sonication is recommended. *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.*

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	2.6928 mL	13.464 mL	26.928 mL
5 mM	0.5386 mL	2.6928 mL	5.3856 mL
10 mM	0.2693 mL	1.3464 mL	2.6928 mL
50 mM	0.0539 mL	0.2693 mL	0.5386 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

Hyun Seung Ban, et al. Suppression of hypoxia-induced HIF-1alpha accumulation by VEGFR inhibitors: Different profiles of AAL993 versus SU5416 and KRN633. Cancer Lett. 2010 Oct 1;296(1):17-26.
Paul W Manley , et al. Anthranilic acid amides: a novel class of antiangiogenic VEGF receptor kinase inhibitors. J Med Chem. 2002 Dec 19;45(26):5687-93.