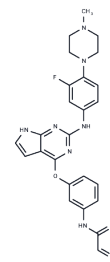


Avitinib

Chemical Properties

CAS No. :	1557267-42-1
Formula:	C ₂₆ H ₂₆ N ₇ O ₂
Molecular Weight:	487.53
Storage:	Store at low temperature Powder: -20°C for 3 years In solvent: -80°C for 1 year <i>Actual storage temperature shall be subject to the COA.</i>



Biological Description

Description	Avitinib (AC0010), also known as AC0010 or AC0010MA, is an orally available, irreversible, epidermal growth factor receptor (EGFR) mutant-selective inhibitor, with potential antineoplastic activity. Upon oral administration, avitinib covalently binds to and inhibits the activity of mutant forms of EGFR, including the drug-resistant T790M EGFR mutant, which prevents signaling mediated by mutant forms of EGFR. This may both induce cell death and inhibit tumor growth in EGFR-mutated tumor cells. EGFR, a receptor tyrosine kinase that is mutated in a variety of Ys, plays a key role in tumor cell proliferation and tumor vascularization. As this agent is selective towards mutant forms of EGFR, its toxicity profile may be reduced when compared to non-selective EGFR inhibitors, which also inhibit wild-type EGFR.
Targets(IC50)	Apoptosis,EGFR,BTK,JAK

Solubility Information

Solubility	DMSO: 88 mg/mL (180.5 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: 3.3 mg/mL (6.77 mM),Sonication is recommended. <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	2.0512 mL	10.2558 mL	20.5116 mL
5 mM	0.4102 mL	2.0512 mL	4.1023 mL
10 mM	0.2051 mL	1.0256 mL	2.0512 mL
50 mM	0.041 mL	0.2051 mL	0.4102 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

Xu X, et al. Mol Y Ther. 2016 Nov;15(11):2586-2597.

Jin X, Yang Y, Liu D, et al. Identification of a covalent NEK7 inhibitor to alleviate NLRP3 inflammasome-driven metainflammation. Cell Communication and Signaling. 2024, 22(1): 565.

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