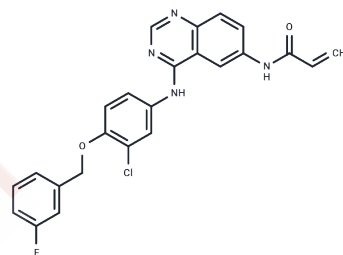


Allitinib

Chemical Properties

CAS No. :	897383-62-9
Formula:	C ₂₄ H ₁₈ ClFN ₄ O ₂
Molecular Weight:	448.88
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	Allitinib (AST-1306) (AST-1306) has anti-cancer activity, and it is an irreversible EGFR and ErbB2 inhibitor with IC ₅₀ s of 0.5 and 3 nM, respectively. [1]
Targets(IC ₅₀)	EGFR
In vitro	AST1306 (AST-1306; 0.19-6.25 μM; 72 hours) inhibits the growth of H1H3T3-EGFR T790M/L858R cells[1]. AST1306 (0.001-1.0 μM; 4 hours) is more than 3000-fold selective for ErbB family kinases over other kinase families[1]. In A549, Calu-3, and SK-OV-3 cells, AST1306 inhibits tyrosine kinase activation and downstream signaling pathways, and dose-dependently and markedly inhibits EGF-induced EGFR phosphorylation in A549 cells[1].
In vivo	AST1306 (AST-1306; oral; 25-100 mg/kg) significantly inhibited tumor growth in SK-OV-3 and Calu-3 xenograft models[1].

Solubility Information

Solubility	DMSO: 55 mg/mL (122.53 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 (4.46 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	2.2278 mL	11.1388 mL	22.2777 mL
5 mM	0.4456 mL	2.2278 mL	4.4555 mL
10 mM	0.2228 mL	1.1139 mL	2.2278 mL
50 mM	0.0446 mL	0.2228 mL	0.4456 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

Xie H, Lin L, Tong L et al. AST1306, a novel irreversible inhibitor of the epidermal growth factor receptor 1 and 2, exhibits antitumor activity both in vitro and in vivo. PLoS One. 2011;6(7):e21487.

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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