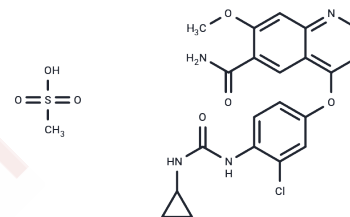


Lenvatinib mesylate

Chemical Properties

CAS No. :	857890-39-2
Formula:	C ₂₂ H ₂₃ ClN ₄ O ₇ S
Molecular Weight:	522.96
Storage:	Store under nitrogen 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	Lenvatinib mesylate (E7080 (mesylate)) is an oral and multi-targeted inhibitor of VEGFR1-3, FGFR1-4, PDGFR, KIT, and RET, with potent antitumor activities.
Targets(IC50)	FGFR,c-RET,c-Kit,PDGFR,VEGFR
In vitro	Lenvatinib is a small-molecule tyrosine kinase inhibitor that inhibits vascular endothelial growth factor receptor (VEGFR1-3), fibroblast growth factor receptor (FGFR1-4), platelet-derived growth factor receptor α (PDGFR α), stem cell factor receptor (KIT), and rearranged during transfection (RET). These receptors are important for tumor angiogenesis, and lenvatinib inhibits tumor angiogenesis by inhibiting function of these receptors[1].

Solubility Information

Solubility	DMSO: 32.67 mg/mL (62.47 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 (3.82 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	1.9122 mL	9.561 mL	19.1219 mL
5 mM	0.3824 mL	1.9122 mL	3.8244 mL
10 mM	0.1912 mL	0.9561 mL	1.9122 mL
50 mM	0.0382 mL	0.1912 mL	0.3824 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

Suyama K, et al. Lenvatinib: A Promising Molecular Targeted Agent for Multiple Cancers. *Cancer Control*. 2018 Jan-Dec;25(1):1073274818789361.

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Matsui J, et al. Multi-kinase inhibitor E7080 suppresses lymph node and lung metastases of human mammary breast tumor MDA-MB-231 via inhibition of vascular endothelial growth factor-receptor (VEGF-R) 2 and VEGF-R3 kinase. *Clin Cancer Res*. 2008, 14(17),545.

Kudo M, et al. Lenvatinib versus sorafenib in first-line treatment of patients with unresectable hepatocellular carcinoma: a randomised phase 3 non-inferiority trial. *Lancet*. 2018 Mar 24;391(10126):1163-1173.

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