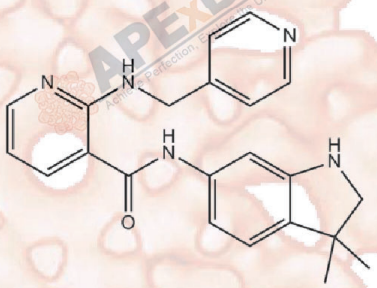
Product Data Sheet

Motesanib



Cat. No.:	A3632
CAS No.:	453562-69-1
Formula:	C22H23N5O
M.Wt:	373.46
Synonyms:	AMG706; AMG 706;AMG-706
Target:	Tyrosine Kinase
Pathway:	c-Kit
Storage:	Store at -20°C

Solvent & Solubility

In Vitro

≥42 mg/mL in DMSO; ≥24 mg/mL in EtOH with ultrasonic; insoluble in H2O

Preparing Stock Solutions

Mass / Solvent / Concentration	1mg	5mg	10mg
1 mM	2.6777 mL	13.3883 mL	26.7766 mL
5 mM	0.5355 mL	2.6777 mL	5.3553 mL
10 mM	0.2678 mL	1.3388 mL	2.6777 mL

Please refer to the solubility information to select the appropriate solvent.

Biological Activity

Shortsummary	Inhibitor of Flk-1/Flt-4/PDGFR-/c-Kit
IC_{50} & Target	2 nM (VEGFR1), 3 nM (VEGFR2), 6 nM (VEGFR3)

In Vitro

Cell Viability Assay

Cell Line:	HUVECs
Preparation method:	This compound is soluble in DMSO. General tips for obtaining a higher concentration: Please warm the tube at 37 °C for 10 minutes and/or shake it in the ultrasonic bath for a while. Stock solution can be stored below - 20 °C for several months.
Reacting conditions:	2 hrs
Applications:	In HUVECs, Motesanib significantly inhibited vascular endothelial growth factor

		(VEGF)-induced cell proliferation, with an IC50 value of 10 nM. However, it showed little effect on basic fibroblast growth factor (bFGF)-induced cell proliferation, with an IC50 value of > 3,000 nM. Similarly, Motesanib potently inhibited platelet-derived growth factor (PDGF)-induced cell proliferation as well as stem cell factor (SCF)-induced c-kit phosphorylation, with IC50 values of 207 nM and 37 nM, respectively.
In Vivo	**Animal experiment**	
	Animal models:	A rat model of corneal angiogenesis, and nude mice bearing A431 cells
	Dosage form:	100 mg/kg; p.o.; q.d. or b.i.d.
	Applications:	At the dose of 100 mg/kg, Motesanib significantly inhibited VEGF-induced vascular permeability in a time-dependent manner. In a rat model of corneal angiogenesis, Motesanib (q.d. or b.i.d.) substantially inhibited VEGF-induced angiogenesis in a dose-dependent manner. In nude mice bearing A431 cells, Motesanib also dose-dependently induced tumor regression by selectively targeting neovascularization in tumor cells.
	Other notes:	Please test the solubility of all compounds indoor, and the actual solubility may slightly differ with the theoretical value. This is caused by an experimental system error and it is normal.

Product Citations

See more customer validations on www.apexbt.com.

References

[1]. Polverino A, Coxon A, Starnes C, et al. AMG 706, an oral, multikinase inhibitor that selectively targets vascular endothelial growth factor, platelet-derived growth factor, and kit receptors, potently inhibits angiogenesis and induces regression in tumor xenografts. Cancer Res. 2006;66(17):8715-21.

Caution

FOR RESEARCH PURPOSES ONLY.

NOT FOR HUMAN, VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

Specific storage and handling information for each product is indicated on the product datasheet. Most APExBIO products are stable under the recommended conditions. Products are sometimes shipped at a temperature that differs from the recommended storage temperature. Shortterm storage of many products are stable in the short-term at temperatures that differ from that required for long-term storage. We ensure that the product is shipped under conditions that will maintain the quality of the reagents. Upon receipt of the product, follow the storage recommendations on the product data sheet.

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