

Product Specification Sheet

Product Name: AMG-706 (Motesanib)

Catalog Number: C2706

Technical information:

Chemical Formula: $C_{22}H_{23}N_5O \cdot 2H_3PO_4$

CAS #: 453562-69-1

Molecular Weight: 569.44

Purity: > 99%

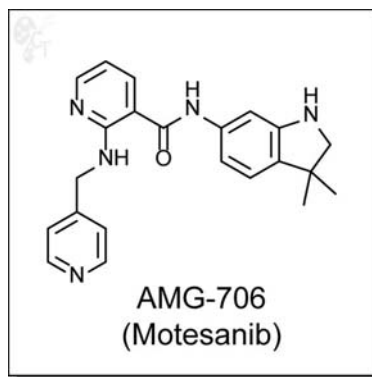
Appearance: White solid

Solubility: Soluble in DMSO up to 100mM

Chemical Name: 3-Pyridinecarboxamide, N-(2,3-dihydro-3,3-dimethyl-1H-indol-6-yl)-2-[(4-pyridinylmethyl)amino]-

Storage: Store solid powder at 4°C desiccated; Store DMSO solution at -20°C.

Shelf Life: In the unopened package, powder is stable for 1 year and DMSO solution is stable for 6 months under proper storage condition.



- Handling:**
- To make 10 mM stock solution, add 0.176mL of DMSO for each mg of AMG-706 (Motesanib)
 - For DMSO solution, briefly spin the vial at 500 rpm in a 50 mL conical tube to ensure maximum sample recovery.

Biological Activity: AMG-706 (Motesanib) is an orally-available, nicotinamide-based, ATP-competitive inhibitor of the VEGFR family of kinases, KIT, and PDGFR with IC50s of 2, 3, and 6 nM (for VEGFR1, VEGFR2, and VEGFR3), 8 nM, and 84 nM, respectively. Besides Ret activity (IC50 = 59 nM), AMG-706 is highly selective against other unrelated kinases, including Src and EGFR. [1] AMG-706 potently inhibits VEGF-induced proliferation of HUVECs with IC50 values of 10 nM. PDGF-induced proliferation and SCF-induced c-Kit phosphorylation was also inhibited at IC50 values of 207 and 37 nM, respectively.

AMG-706 was shown to increase tumor response to radiation in UM-SCC1 and SCC-1483 xenografts of head and neck squamous cell carcinomas. [2]

- Reference:**
1. Polverino 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, 8715-8721. Pubmed ID: 16951187
 2. Kruser et al., Augmentation of radiation response by motesanib, a multikinase inhibitor that targets vascular endothelial growth factor receptors. *Clin. Cancer Res.* 2010, 16, 3639-3647. Pubmed ID: 20507929

To reorder: <http://www.cellagentech.com/AMG-706-Motesanib/>

For Technical Support: technical@cellagentech.com

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