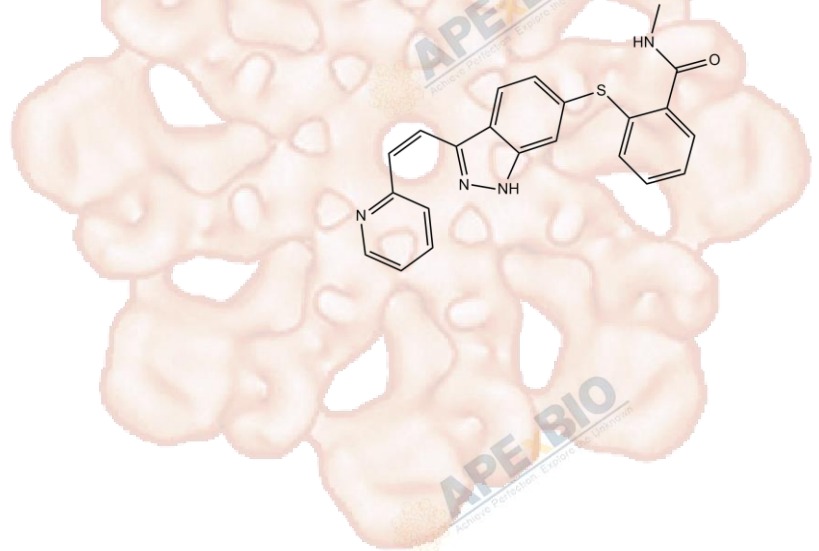


Product Data Sheet

Axitinib (AG 013736)

Cat. No.:	A8370
CAS No.:	319460-85-0
Formula:	C ₂₂ H ₁₈ N ₄ O ₂ S
M.Wt:	386.47
Synonyms:	AG 013736
Target:	Tyrosine Kinase
Pathway:	VEGFR
Storage:	Store at -20°C



Solvent & Solubility

insoluble in H₂O; ≥19.3 mg/mL in DMSO; ≥3.52 mg/mL in EtOH

In Vitro

Preparing Stock Solutions	Solvent	Mass		
		1mg	5mg	10mg
	Concentration			
	1 mM	2.5875 mL	12.9376 mL	25.8752 mL
	5 mM	0.5175 mL	2.5875 mL	5.1750 mL
	10 mM	0.2588 mL	1.2938 mL	2.5875 mL

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

Biological Activity

Shortsummary

VEGFR1/ c-Kit inhibitor

IC₅₀ & Target

0.1 nM (VEGFR1/FLT1), 0.18 nM (VEGFR2/Flk1), 0.2 nM (VEGFR2/KDR), 0.1 nM-0.3 nM (VEGFR3), 1.6 nM (PDGFRβ), 1.7 nM (c-Kit)

In Vitro

Cell Viability Assay

Cell Line: PAE cells overexpressing RTK, Human umbilical vein endothelial cells (HUVEC)

Preparation method: The solubility of this compound in DMSO is >10 mM. 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:	Cellular receptor kinase phosphorylation assay: 45 min at 37 °C in the presence of 1 mmol/L Na3VO4
	Applications:	In transfected or endogenous RTK-expressing cells, axitinib potently blocked growth factor-stimulated phosphorylation of VEGFR-2 and VEGFR-3 with average IC50 values of 0.2 and 0.1 to 0.3 nmol/L, respectively. Axitinib inhibited VEGF-stimulated survival of HUVEC with IC50 value of 0.17 nmol/L.
In Vivo	Animal experiment	
	Animal models:	Female nu/nu mice or severe combined immunodeficient beige mice(ages 7-10 weeks)
	Dosage form:	Axitinib was dosed as a suspension at 5 mL/kg orally twice daily
	Applications:	Axitinib dose-dependently inhibits tumor growth in MV522 with ED50 value of 8.8 mg/kg twice daily, based on the relationship between dose and the corresponding TGI (tumor growth inhibition).
	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

1. Anna V. Ivanina, Ballav Borah, et al. "The Role of the Vascular Endothelial Growth Factor (VEGF) Signaling in Biomineralization of the Oyster Crassostrea gigas." Front. Mar. Sci., 28 August 2018.

See more customer validations on www.apexbt.com.

References

[1]. Hu-Lowe D D, Zou H Y, Grazzini M L, et al. Nonclinical antiangiogenesis and antitumor activities of axitinib (AG-013736), an oral, potent, and selective inhibitor of vascular endothelial growth factor receptor tyrosine kinases 1, 2, 3. Clinical Cancer Research, 2008, 14(22): 7272-7283.

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 APEX BIO products are stable under the recommended conditions. Products are sometimes shipped at a temperature that differs from the recommended storage temperature. Short-term 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.



APExBIO Technology

www.apexbt.com

7505 Fannin street, Suite 410, Houston, TX 77054.

Tel: +1-832-696-8203 | Fax: +1-832-641-3177 | Email: info@apexbt.com

