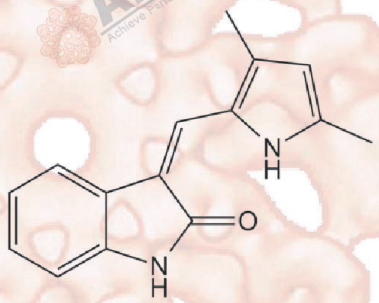
Product Data Sheet

SU5416

Cat. No.:	A3847
CAS No.:	204005-46-9
Formula:	C15H14N2O
M.Wt:	238.28
Synonyms:	Semaxinib; SU-5416; SU 5416
Target:	Tyrosine Kinase
Pathway:	c-RET
Storage:	Desiccate at -20°C



Solvent & Solubility

In Vitro

insoluble in EtOH; insoluble in H2O; ⩾11.9 mg/mL in DMSO

Preparing Stock Solutions

Mass / Solvent / Concentration	1mg	5mg	10mg
1 mM	4.1967 mL	20.9837 mL	41.9674 mL
5 mM	0.8393 mL	4.1967 mL	8.3935 mL
10 mM	0.4197 mL	2.0984 mL	4.1967 mL

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

Biological Activity

Shortsummary	VEGF receptor inhibitor and AHR agonist
IC_{50} & Target	1.23 μM (VEGFR)

In Vitro

Cell Viability Assay

Cell Line:	HUVECs
Preparation method:	The solubility of this compound in DMSO is > 11.9 mg/mL. 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:	0.01 ~ 100 μM; 2 days

	Applications:	In HUVECs, SU5416 dose-dependently inhibited VEGF- and FGF-driven mitogenesis, with the IC50 values of 0.04 ± 0.02 μM and 50 μM, respectively. SU5416 showed > 1000-fold selectivity over VEGF- driven mitogenesis than FGF-driven mitogenesis.
In Vivo	**Animal experiment**	
	Animal models:	Female BALB/c nu/nu mice bearing A375 cell xenografts
	Dosage form:	1 ~ 25 mg/kg; i.p.; q.d., for 39 days
	Applications:	In BALB/c nu/nu mice bearing A375 cell xenografts, SU5416 at the dose of 3 mg/kg/day significantly inhibited tumor growth. SU5416 at the dose of 25 mg/kg/day resulted in a > 85% inhibition of tumor growth with no mortality.
	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]. Fong TA, Shawver LK, Sun L, Tang C, App H, Powell TJ, Kim YH, Schreck R, Wang X, Risau W, Ullrich A, Hirth KP, McMahon G. SU5416 is a potent and selective inhibitor of the vascular endothelial growth factor receptor (Flk-1/KDR) that inhibits tyrosine kinase catalysis, tumor vascularization, and growth of multiple tumor types. Cancer Res. 1999;59(1):99-106.

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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