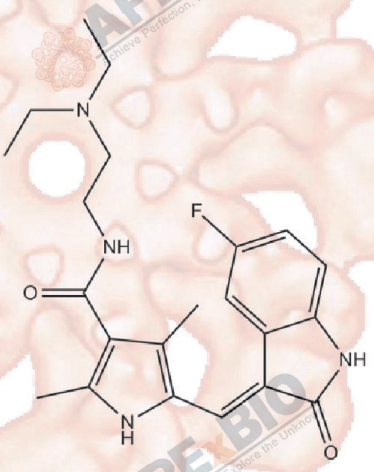
Product Name: Sunitinib
Revision Date: 10/11/2024

Product Data Sheet

Sunitinib

Cat. No.:	B1045
CAS No.:	557795-19-4
Formula:	C22H27FN4O2
M.Wt:	398.47
Synonyms:	
Target:	Tyrosine Kinase
Pathway:	PDGFR
Storage:	Store at -20°C



Solvent & Solubility

In Vitro

insoluble in H2O; ⩾19.9 mg/mL in DMSO with gentle warming; ⩾3.16 mg/mL in EtOH with gentle warming

Preparing Stock Solutions

Mass / Solvent / Concentration	1mg	5mg	10mg
1 mM	2.5096 mL	12.5480 mL	25.0960 mL
5 mM	0.5019 mL	2.5096 mL	5.0192 mL
10 mM	0.2510 mL	1.2548 mL	2.5096 mL

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

Biological Activity

Shortsummary	RTK inhibitor
IC_{50} & Target	(VEGFR-1), 4 nM69 nM (VEGFR-2), 39 nM (VEGFR3), 1-10 nM (PDGFRα), (PDGFRβ)

In Vitro

Cell Viability Assay

Cell Line:	Human 786-O and RCC4 cells, murine Renca cells
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:	10 μM, 24 hours
	Applications:	Sunitinib induced RCC tumor cell apoptosis in all three tumor cell lines. It also inhibited cell proliferation in a dose-dependent manner. For concentrations at which sunitinib caused effective tumor cell death; there were corresponding increases in cleaved PARP. Sunitinib treatment (24 h) of 786-O, RCC4 and Renca tumor cells reduced expression of several key anti-apoptotic and pro-proliferation genes, including Cyclin E, Cyclin D1 and Survivin.
In Vivo	**Animal experiment**	
	Animal models:	Female BALB/c mice injected with Renca cells
	Dosage form:	Oral administration, 40, 20, 10 mg/kg body weight, daily
	Applications:	Sunitinib induced tumor cell apoptosis in vivo as early as 1 day post treatment, which occurred in the presence of apparently intact tumor vessels. There appeared to be more apoptosis in the tumor on days 3 and 11 post treatment, with greater disruption of the tumor vasculature. Sunitinib treatment reduced Stat3 activity and induced tumor cell death as early as one day post treatment.
	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] Xin H, Zhang C, Herrmann A, et al. Sunitinib inhibition of Stat3 induces renal cell carcinoma tumor cell apoptosis and reduces immunosuppressive cells. Cancer research, 2009, 69(6): 2506-2513.

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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