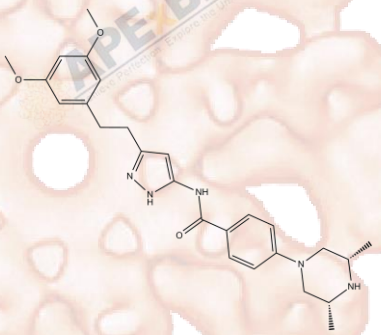
Product Data Sheet

AZD4547



Cat. No.:	A8350
CAS No.:	1035270-39-3
Formula:	C26H33N5O3
M.Wt:	463.57
Synonyms:	AZD 4547;AZD-4547
Target:	Tyrosine Kinase
Pathway:	FGFR
Storage:	Store at -20°C

Solvent & Solubility

In Vitro

⩾23.2 mg/mL in DMSO; insoluble in H2O; ⩾6.33 mg/mL in EtOH

Preparing Stock Solutions

Mass / Solvent / Concentration	1mg	5mg	10mg
1 mM	2.1572 mL	10.7859 mL	21.5717 mL
5 mM	0.4314 mL	2.1572 mL	4.3143 mL
10 mM	0.2157 mL	1.0786 mL	2.1572 mL

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

Biological Activity

Shortsummary	FGFR inhibitor
IC_{50} & Target	0.2 nM (FGFR1), 2.5 nM (FGFR2), 1.8 nM (FGFR3)

In Vitro

Cell Viability Assay

Cell Line:	KG1a, Sum52-PE, KMS11 and MCF7 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:	1 μM; 72 hrs

	Applications:	AZD4547 affected AKT phosphorylation in Sum52-PE and MCF7 cells, but not in KG1a and KMS11 cells. AZD4547 treatment significantly induced apoptosis in Sum52-PE and KMS11 cells, and dramatically increased G1 arrest but not apoptosis in KG1a cells. In MCF7 cells, AZD4547 showed no effect on cell cycle distribution or apoptosis.
In Vivo	**Animal experiment**	
	Animal models:	SCID mice bearing KMS11 tumors
	Dosage form:	1.5 ~ 12.5 mg/kg, p.o.; q.d. or b.i.d.
	Applications:	In mice bearing KMS11 tumors, AZD4547 (3 mg/kg, b.i.d.) significantly inhibited tumor growth (53%). AZD4547 treatment at 12.5 mg/kg once daily or 6.25 mg/kg twice daily resulted in complete tumor stasis due to dose-dependent modulation of phospho-FGFR3, and reduced KMS11 cell proliferation.
	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. Driehuis E, Kolders S, et al. "Oral Mucosal Organoids as a Potential Platform for Personalized Cancer Therapy." Cancer Discov. 2019 Jul;9(7):852-871.PMID:31053628

See more customer validations on www.apexbt.com.

References

[1]. Gavine PR, Mooney L, Kilgour E, Thomas AP, Al-Kadhimi K, Beck S, Rooney C, Coleman T, Baker D, Mellor MJ, Brooks AN, Klinowska T. AZD4547: an orally bioavailable, potent, and selective inhibitor of the fibroblast growth factor receptor tyrosine kinase family. Cancer Res.2012 Apr 15;72(8):2045-56.

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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