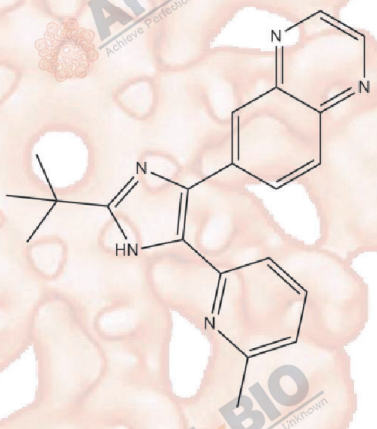
Product Data Sheet

SB525334



Cat. No.:	A5602
CAS No.:	356559-20-1
Formula:	C21H21N5
M.Wt:	343.42
Synonyms:	
Target:	TGF-β / Smad Signaling
Pathway:	TGF-βR1(ALK5)
Storage:	Store at -20°C

Solvent & Solubility

In Vitro

⩾34.3 mg/mL in DMSO; insoluble in H2O; ⩾23.8 mg/mL in EtOH

Preparing Stock Solutions

Mass / Solvent / Concentration	1mg	5mg	10mg
1 mM	2.9119 mL	14.5594 mL	29.1189 mL
5 mM	0.5824 mL	2.9119 mL	5.8238 mL
10 mM	0.2912 mL	1.4559 mL	2.9119 mL

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

Biological Activity

Shortsummary	(TGF-beta1) receptor inhibitor
IC_{50} & Target	14.3 nM (TGF-β1 (ALK5))

In Vitro

Cell Viability Assay

Cell Line:	Human renal proximal tubule epithelial (RPTE) 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; 1 hr

	Applications:	In RPTE cells, SB525334 reduced endogenous TGF-β1 signaling.
In Vivo	**Animal experiment**	
	Animal models:	Bleomycin-induced pulmonary fibrosis in female Eker rats
	Dosage form:	10 mg/kg/day; p.o.
	Applications:	In Eker rats, SB525334 significantly decreased uterine mesenchymal tumor incidence, multiplicity and size.
	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]. Grygielko ET, Martin WM, Tweed C, Thornton P, Harling J, Brooks DP, Laping NJ. Inhibition of gene markers of fibrosis with a novel inhibitor of transforming growth factor-beta type I receptor kinase in puromycin-induced nephritis. J Pharmacol Exp Ther. 2005 Jun;313(3):943-51.

[2]. Laping NJ, Everitt JI, Frazier KS, Burgert M, Portis MJ, Cadacio C, Gold LI, Walker CL. Tumor-specific efficacy of transforming growth factor-beta RI inhibition in Eker rats. Clin Cancer Res. 2007 May 15;13(10):3087-99.

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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