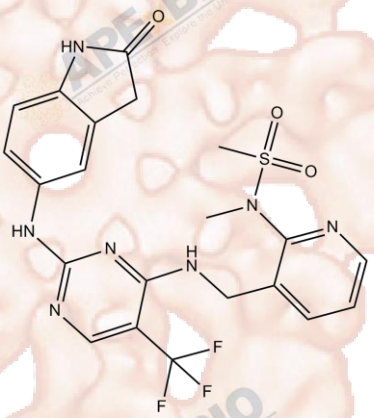
Product Data Sheet

PF-562271



Cat. No.:	A8310
CAS No.:	717907-75-0
Formula:	C21H20F3N7O3S
M.Wt:	507.49
Synonyms:	PF562271;PF 562271
Target:	Tyrosine Kinase
Pathway:	Pyk2
Storage:	Store at -20°C

Solvent & Solubility

⩾25.35 mg/mL in DMSO; insoluble in H2O; ⩾2.25 mg/mL in EtOH with gentle warming and ultrasonic

In Vitro — Preparing Stock Solutions

Concentration \ Mass (Solvent)	1mg	5mg	10mg
1 mM	1.9705 mL	9.8524 mL	19.7048 mL
5 mM	0.3941 mL	1.9705 mL	3.9410 mL
10 mM	0.1970 mL	0.9852 mL	1.9705 mL

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

Biological Activity

Shortsummary	ATP-competitive FAK inhibitor, reversible
IC_{50} & Target	1.5 nM (FAK), 14 nM (Pyk2)

In Vitro

Cell Viability Assay

Cell Line:	PC3-M cells
Preparation method:	The solubility of this compound in DMSO is > 25.4 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:	1.1 or 3.3 μmol/L; 48 hrs

	Applications:	After 48-hour exposure, PF-562271 at the concentration of 3.3 μM altered the cell cycle progression of PC3-M cells. However, the inhibitory activity of PF-562271 against cdk5/p35 enzyme was undetected.
In Vivo	**Animal experiment**	
	Animal models:	Nude mice bearing U87MG human glioblastoma cells
	Dosage form:	3.3, 10 or 33 mg/kg; p.o.
	Applications:	In nude mice bearing U87MG human glioblastoma cells, PF-562271 inhibited FAK phosphorylation in a dose- and time-dependent manner. After 1-hr exposure to 33 mg/kg PF-562271, maximal pFAK inhibition (78%) was achieved. However, inhibition effect of PF-562271 on FAK phosphorylation was sustained (> 50%) for > 4 hrs after this single p.o. dose. The calculated EC50 value was 93 ng/mL.
	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. Kath C, Goni-Oliver P, et al. "PTEN suppresses axon outgrowth by down-regulating the level of detyrosinated microtubules." PLoS One. 2018 Apr 4;13(4):e0193257.PMID:29617365

See more customer validations on www.apexbt.com.

References

[1]. Roberts WG, Ung E, Whalen P, Cooper B, Hulford C, Autry C, Richter D, Emerson E, Lin J, Kath J, Coleman K, Yao L, Martinez-Alsina L, Lorenzen M, Berliner M, Luzzio M, Patel N, Schmitt E, LaGreca S, Jani J, Wessel M, Marr E, Griffor M, Vajdos F. Antitumor activity and pharmacology of a selective focal adhesion kinase inhibitor, PF-562,271. Cancer Res. 2008 Mar 15;68(6):1935-44. doi: 10.1158/0008-5472.CAN-07-5155.

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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