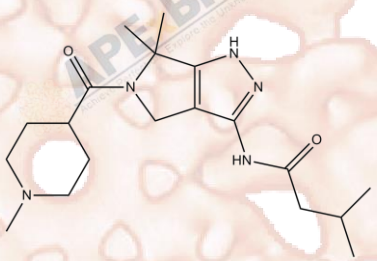
Product Data Sheet

PHA-793887



Cat. No.: A5459
CAS No.: 718630-59-2
Formula: C19H31N5O2
M.Wt: 361.48
Synonyms:
Target: Cell Cycle/Checkpoint
Pathway: Cyclin-Dependent Kinases
Storage: Store at -20°C

Solvent & Solubility

In Vitro

insoluble in H2O; ⩾18.05 mg/mL in DMSO; ⩾7.73 mg/mL in EtOH

Preparing Stock Solutions

Mass / Solvent / Concentration	1mg	5mg	10mg
1 mM	2.7664 mL	13.8320 mL	27.6640 mL
5 mM	0.5533 mL	2.7664 mL	5.5328 mL
10 mM	0.2766 mL	1.3832 mL	2.7664 mL

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

Biological Activity

Shortsummary	Pan-Cdk inhibitor
IC_{50} & Target	5 nM (CDK5/p25), 8 nM (CDK2/CyclinA), 8 nM (CDK2/CyclinE), 10 nM (CDK7/CyclinH), 60 nM (CDK1/CyclinB)

In Vitro

Cell Viability Assay

Cell Line:	A2780 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:	0.1 nM ~ 1 μM; 72 hrs
	Applications:	In A2780 cells, PHA-793887 (1 μM) induced a decrease in the S phase, a subsequent increase of the G1 phase and a slight accumulation of the G2/M phase.
In Vivo	**Animal experiment**	
	Animal models:	Mouse xenograft models of human ovarian A2780, colon HCT-116 and pancreatic BX-PC3 carcinoma
	Dosage form:	10, 20 and 30 mg/kg; i.v.; q.d., for 10 days
	Applications:	In the human ovarian A2780, colon HCT-116, and pancreatic BX-PC3 carcinoma xenograft models, PHA-793887 (10 ~ 30 mg/kg) significantly inhibited tumor growth.
	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. Song L, Park SE, et al. "Inhibition of CDK5Alleviates the Cardiac Phenotypes in Timothy Syndrome." Stem Cell Reports. 2017Jul 11;9(1):50-57.PMID:28648896

See more customer validations on www.apexbt.com.

References

[1]. Brasca MG, Albanese C, Alzani R, Amici R, Avanzi N, Ballinari D, Bischoff J, Borghi D, Casale E, Croci V, Fiorentini F, Isacchi A, Mercurio C, Nesi M, Orsini P, Pastori W, Pesenti E, Pevarello P, Roussel P, Varasi M, Volpi D, Vulpetti A, Ciomei M. Optimization of 6,6-dimethyl pyrrolo[3,4-c]pyrazoles: Identification of PHA-793887, a potent CDK inhibitor suitable for intravenous dosing. Bioorg Med Chem. 2010 Mar 1;18(5):1844-53.

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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