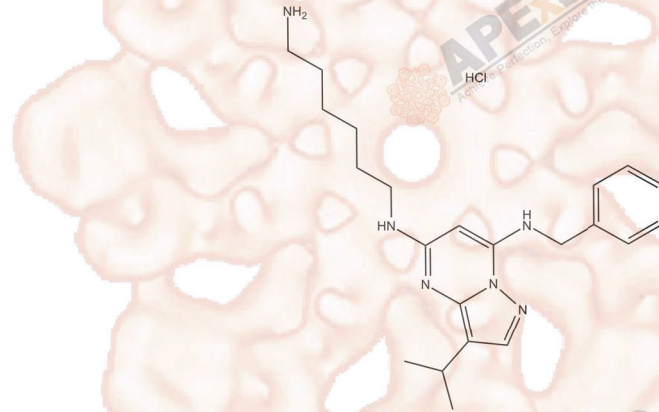


Product Data Sheet

BS-181 HCl

Cat. No.:	A5700
CAS No.:	1397219-81-6
Formula:	C ₂₂ H ₃₂ N ₆ ·HCl
M.Wt:	416.99
Synonyms:	
Target:	Cell Cycle/Checkpoint
Pathway:	Cyclin-Dependent Kinases
Storage:	Store at -20°C



Solvent & Solubility

≥20.85mg/mL in DMSO, ≥6.49 mg/mL in EtOH with ultrasonic, insoluble in H₂O

In Vitro

Preparing Stock Solutions	Mass		1mg	5mg	10mg
	Solvent	Concentration			
		1 mM	2.3981 mL	11.9907 mL	23.9814 mL
		5 mM	0.4796 mL	2.3981 mL	4.7963 mL
		10 mM	0.2398 mL	1.1991 mL	2.3981 mL

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

Biological Activity

Shortsummary

CDK7 inhibitor, highly selective

IC₅₀ & Target

21 nM (CDK7)

In Vitro

Cell Viability Assay

Cell Line:	MCF-7 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:	50 μM; 24 hrs
Applications:	In MCF-7 cells, BS-181 HCl inhibited the phosphorylation of CDK7 substrates,

and promoted cell cycle arrest and apoptosis to inhibit the growth of cancer cell lines.

Animal experiment

Animal models: Mice bearing MCF-7 xenografts

Dosage form: 10 or 20 mg/kg; i.p.; b.i.d., for 2 weeks

Applications: In mice bearing MCF-7 xenografts, BS-181 HCl inhibited tumor growth in a dose-dependent manner, without apparent toxicity.

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.

In Vivo

Product Citations

See more customer validations on www.apexbt.com.

References

[1]. Ali S, Heathcote DA, Kroll SH, Jogalekar AS, Scheiper B, Patel H, Brackow J, Siwicka A, Fuchter MJ, Periyasamy M, Tolhurst RS, Kanneganti SK, Snyder JP, Liotta DC, Aboagye EO, Barrett AG, Coombes RC. The development of a selective cyclin-dependent kinase inhibitor that shows antitumor activity. *Cancer Res.* 2009;69(15):6208-15.

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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