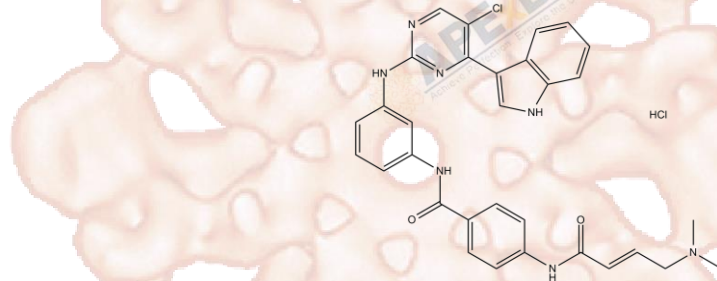


Product Data Sheet

THZ1 Hydrochloride

Cat. No.:	B4736
CAS No.:	1604810-83-4 (free base)
Formula:	C ₃₁ H ₂₉ Cl ₂ N ₇ O ₂
M.Wt:	602.51
Synonyms:	
Target:	Cell Cycle/Checkpoint
Pathway:	Cyclin-Dependent Kinases
Storage:	Store at -20°C



Solvent & Solubility

≥30.13 mg/mL in DMSO; insoluble in H₂O; insoluble in EtOH

In Vitro

Preparing Stock Solutions	Solvent	Mass		
		1mg	5mg	10mg
	Concentration			
	1 mM	1.6597 mL	8.2986 mL	16.5972 mL
	5 mM	0.3319 mL	1.6597 mL	3.3194 mL
	10 mM	0.1660 mL	0.8299 mL	1.6597 mL

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

Biological Activity

Shortsummary

CDK7 inhibitor

IC₅₀ & Target

In Vitro

Cell Viability Assay

Cell Line:	Jurkat and Loucy T-ALL cell lines
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:	72 hours IC ₅₀ : 50 nM (for Jurkat cells), 0.55 nM (for Loucy T-ALL cells)

	Applications:	As a CDK7 inhibitor, THZ1 potently inhibited proliferation of Jurkat and Loucy T-ALL cell lines with IC50 values of 50 nM and 0.55 nM, respectively.
In Vivo	Animal experiment	
	Animal models:	Mice bearing KOPTK1 xenografts
	Dosage form:	10 mg/kg, twice daily for 29 days
	Applications:	THZ1 exhibited efficacy in a bioluminescent xenografted mouse model using the human T-ALL cell-line KOPTK1 when dosed twice daily at 10mg/kg. THZ1 was well tolerated at these doses with no observable body weight loss or behavioural changes, suggesting that it caused no overt toxicity in the animals.
	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] Kwiatkowski N, Zhang T, Rahl P B, et al. Targeting transcription regulation in cancer with a covalent CDK7 inhibitor. Nature, 2014, 511(7511): 616-620.

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 APEX BIO products are stable under the recommended conditions. Products are sometimes shipped at a temperature that differs from the recommended storage temperature. Short-term 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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