

Product Data Sheet

PCI-24781 (CRA-024781)

Cat. No.:	A4098
CAS No.:	783355-60-2
Formula:	C21H23N3O5
M.Wt:	397.42
Synonyms:	
Target:	DNA Damage/DNA Repair
Pathway:	HDAC
Storage:	Store at -20°C



Solvent & Solubility

insoluble in H₂O; insoluble in EtOH; ≥11.75 mg/mL in DMSO with gentle warming

In Vitro	Preparing Stock Solutions	Mass		1mg	5mg	10mg			
		Solvent							
		Concentration							
		1 mM		2.5162 mL	12.5811 mL	25.1623 mL			
		5 mM		0.5032 mL	2.5162 mL	5.0325 mL			
		10 mM		0.2516 mL	1.2581 mL	2.5162 mL			

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

Biological Activity

Shortsummary	Pan-HDAC inhibitor	
IC ₅₀ & Target	7 nM (Ki) (HDAC1), 8.2 nM (Ki) (HDAC3/SMRT), 17 nM (Ki) (HDAC6), 19 nM (Ki) (HDAC2), 24 nM (HDAC10), 280 nM (HDAC8)	
Cell Viability Assay		
In Vitro	Cell Line:	HCT116, DLD-1, HCT-15, MCF-7, BT-549, NCI-H226, CWR-22RV1, NCI-PC3, SKOV-3, OVCAR-3 and HUVEC 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:	~ 10 µM; 48, 72, 96, or 120 hrs
Applications:	PCI-24781 exhibited potent antitumor activity against a variety of tumor cell lines with the GI50% values ranging from 0.15 µM to 3.09 µM. In addition, PCI-24781 also showed an antiproliferative effect on HUVEC with the GI50% value of 0.43 µM.
Animal experiment	
Animal models:	Female BALB/c nu/nu mice implanted s.c. with HCT116 and DLD-1 tumor cells
Dosage form:	200 mg/kg; i.v.; q.d., every other day
Applications:	Administration of PCI-24781 (200 mg/kg; i.v.; q.d., every other day) significantly inhibited the growth of HCT116 and DLD-1 xenografts in mice by 69% and 59%, respectively.
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]. Buggy JJ, Cao ZA, Bass KE, et al. CRA-024781: a novel synthetic inhibitor of histone deacetylase enzymes with antitumor activity in vitro and in vivo. Mol Cancer Ther, 2006, 5(5): 1309-1317.

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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