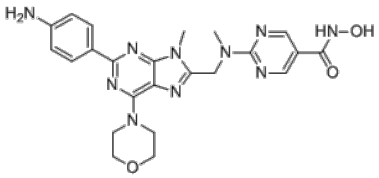
ProbeChem®
Expedite Your Scientific Research

WWW.PROBECHEM.COM

Data Sheet

Global Supplier of Chemical Probes, Inhibitors & Agonists.

Product Name	:	Purinostat
Cat. No.	:	PC-20479
CAS No.	:	1929583-17-4
Molecular Formula	:	$C_{23}H_{26}N_{10}O_3$
Molecular Weight	:	490.53
Target	:	HDAC
Solubility	:	10 mM in DMSO



Biological Activity

Purinostat is a potent, highly selective **class I and IIb HDAC inhibitor** with IC50 of 0.81, 1.4, 1.7, and 3.8 nM for class I HDAC1, 2, 3, and 8, and 11.5, 1.1 nM for class IIb HDAC 6 and 10, respectively.
Purinostat mesylate displays much weaker activity against HDAC IIa and IV (HDAC4,5,7,9 11) with IC50 of 426-3,349 nM, also has no significant inhibitory activity on 89 kinase enzymes involved in tumor regulation.
Purinostat mesylate showed approximately 100-fold higher than Chidamide (Tucidinostat, Cat. PC-35344) inhibition on HDAC1, 2, 8, and 10 subtypes.
Purinostat mesylate showed better inhibitory effects than LBH589 (Panobinostat, Cat. PC-42468) against various hematologic tumor cell lines with IC50 values at nanomolar or subnanomolar.
Purinostat mesylate effectively increased the levels of Ac-H3, Ac-H4, and decreased HSP90 in a concentration-dependent manner in vitro of Ph+ leukemia cell lines, consistent with the BCR-ABL downregulation, p-SRC and STAT5 were also significantly suppressed.
Purinostat mesylate (5 mg/kg) exerted the robust antitumor activity on BL-2 secondary transplantation mouse model of Ph+ B-ALL.
Purinostat mesylate showed potent antileukemia effects in BCR-ABL(T315I)–induced primary B-ALL mice.

References

Yang L, et al. ***Clin Cancer Res***. 2019 Dec 15;25(24):7527-7539.

Chen Y, et al. ***J Med Chem*** 2016;59:5488–504.

Caution: Product has not been fully validated for medical applications. Lab Use Only!

E-mail: tech@probechem.com