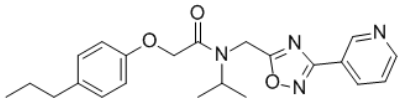
ProbeChem®
Expedite Your Scientific Research

WWW.PROBECHEM.COM

Data Sheet

Global Supplier of Chemical Probes, Inhibitors & Agonists.

Product Name	:	PI-1840
Cat. No.	:	PC-42948
CAS No.	:	1401223-22-0
Molecular Formula	:	$C_{22}H_{26}N_4O_3$
Molecular Weight	:	394.4668
Target	:	Proteasome
Solubility	:	10 mM in DMSO



Biological Activity

PI-1840 is a potent, selective, noncovalent, reversible inhibitor for **proteasome chymotrypsin-like** (CT-L) activity with IC50 of 27 nM, shows no effect on trypsin-like and peptidylglutamyl peptide hydrolyzing activities (IC50>100 uM).
PI-1840 also displays 100-fold more selectivity for the constitutive proteasome over the immunoproteasome.
PI-1840 induces the accumulation of proteasome substrates p27, Bax, and IκB-α, inhibits survival pathways and viability, and induces apoptosis in intact cancer cells, also sensitizes human cancer cells to the mdm2/p53 disruptor Nutlin.
PI-1840 suppresses the growth in nude mice of human breast tumor xenografts.

References

Kazi A, et al. ***J Biol Chem***. 2014 Apr 25;289(17):11906-15.

Ozcan S, et al. ***J Med Chem.*** 2013 May 23;56(10):3783-805.

E-mail: tech@probechem.com