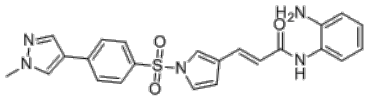
ProbeChem®
Expedite Your Scientific Research

WWW.PROBECHEM.COM

Data Sheet

Global Supplier of Chemical Probes, Inhibitors & Agonists.

Product Name	:	Domatinostat
Cat. No.	:	PC-73192
CAS No.	:	910462-43-0
Molecular Formula	:	$C_{23}H_{21}N_5O_3S$
Molecular Weight	:	447.51
Target	:	HDAC
Solubility	:	10 mM in DMSO



Biological Activity

Domatinostat (4SC-202) is a selective **class I HDAC** inhibitor with IC50 of 1.20/1.12/0.57 uM for HDAC1/2/3, repectively.
Domatinostat (4SC-202) weakly inhibits Class III (HDAC11, IC50=9.7 uM), does not inhibit HDAC4/6/7/8/9 (IC50>50 uM).
Domatinostat (4SC-202) potently inhibited survival and proliferation of primary human colon cancer cells and established CRC lines (HT-29, HCT-116, HT-15, and DLD-1).
4SC-202 provoked apoptosis activation, induced dramatic G2-M arrest in CRC cells. 4SC-202 activates ASK1-dependent mitochondrial apoptosis pathway to potently inhibit human HCC cells.
4SC-202 induces hyperacetylation of histone H3 in a dose dependent manner with a cellular potency EC50 of 1.1 uM.
4SC-202 shows a broad anti-proliferative/cytotoxic activity towards human cancer cell lines from various indications with mean IC50 of 0.7 uM.
4SC-202 showed pronounced and robust anti-tumor activity in various cancer cell lines and xenograft animal models.

References

Fu M, et al. ***Biochem Biophys Res Commun***. 2016 Mar 4;471(2):267-73.

Zhijun H, et al. ***Tumour Biol.*** 2016 Aug;37(8):10257-67.

Pinkerneil M, et al. ***Target Oncol***. 2016 Dec;11(6):783-798.

von Tresckow B, et al. ***Eur J Haematol***. 2019 Feb;102(2):163-173.

E-mail: tech@probechem.com