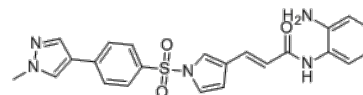


Product Name : Domatinostat
Cat. No. : PC-73192
CAS No. : 910462-43-0
Molecular Formula : C₂₃H₂₁N₅O₃S
Molecular Weight : 447.51
Target : HDAC
Solubility : 100 mM in DMSO



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, respectively. 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) potentially 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 potentially 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.

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

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