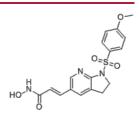


WWW.PROBECHEM.COM

Data Sheet

Global Supplier of Chemical Probes, Inhibitors & Agonists.

Product Name	:	MPT0B390
Cat. No.	:	PC-49104
CAS No.	:	1817802-18-8
Molecular Formula	:	C ₁₇ H ₁₇ N ₃ O ₅ S
Molecular Weight	:	375.40
Target	:	HDAC
Solubility	:	10 mM in DMSO



Biological Activity

MPT0B390 (B390) is a selective **HDAC1/2** inhibitor and an effective inducer of metalloproteinase 3 (**TIMP3**), significantly upregulates TIMP3 expression in colorectal cancer cells.

MPT0B390 exhibits potent antiproliferative activity against human colon cancer cell line HCT116 with IC50 of 0.03 uM. MPT0B390 has lower IC50 and greater effect when compared with other commonly used HDAC1/2 inhibitor, SAHA. MPT0B390 inhibits cell growth of MIA PaCa-2 with IC50 of 0.53 uM, with no effect on normal human pancreatic ductal epithelial cell line (HPDE-E6E7).

MPT0B390 upregulates DUSP2 expression and decreases ERK phosphorylation MIA PaCa-2 cells, exert antitumor effects via reinforcement of DUSP2 expression.

MPT0B390 inhibits pancreatic cancer migration, EV-VEGF-C expression, and proliferation of lymphatic endothelial cells. MPT0B390 (12.5 mg/kg) reduces tumor-associated lymphangiogenesis and tumor invasion, alleviates cancer malignancy in KPC orthotopic mouse model.

References

Huang HL, et al. *Theranostics.* 2019 Sep 18;9(22):6676-6689.
2. Pei-Chi Hou, et al. *Cancer Res.* 2017 Aug 15;77(16):4305-4316.
3. Chu-An Wang, et al. *Mol Cancer Ther.* 2021 Sep;20(9):1550-1560.

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

E-mail: tech@probechem.com