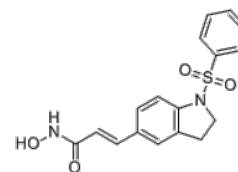


**Product Name** : MPT0E028  
**Cat. No.** : PC-35302  
**CAS No.** : 1338320-94-7  
**Molecular Formula** : C<sub>17</sub>H<sub>16</sub>N<sub>2</sub>O<sub>4</sub>S  
**Molecular Weight** : 344.385  
**Target** : HDAC  
**Solubility** : 10 mM in DMSO



## Biological Activity

Imofinostat (MPT0E028) is a potent **HDAC** inhibitor with IC<sub>50</sub> of 53.0 nM, 106.2 nM, 29.5 nM for **HDAC1**, **HDAC2** and **HDAC6**, respectively, inhibits nuclear HDAC activity with IC<sub>50</sub> of 11.1 nM in HeLa cells, 9-30 times more potent than SAHA. MPT0E028 inhibits class I HDAC1, HDAC2, and class IIb HDAC6 with IC<sub>50</sub> of 53, 106, and 29.5 nM, respectively, weakly inhibits HDAC8 (IC<sub>50</sub>=2.5 uM), but not for HDAC4 (IC<sub>50</sub>>10 uM). MPT0E028 inhibits the growth of HCT116 and MDA-MB-231 cells with IC<sub>50</sub> of 0.09 and 0.19 uM. MPT0E028 inhibits HCT116 tumor xenograft in vivo without significant adverse effects, shows stronger anti-cancer efficacy than SAHA.

## References

- Huang HL, et al. *PLoS One*. 2012;7(8):e43645.  
Chen MC, et al. *Cell Death Dis*. 2013 Sep 19;4:e810.  
Chen CH, et al. *Clin Cancer Res*. 2014 Mar 1;20(5):1274-1287.  
Huang HL, et al. *Oncotarget*. 2015 Mar 10;6(7):4976-91.

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

E-mail: tech@probechem.com