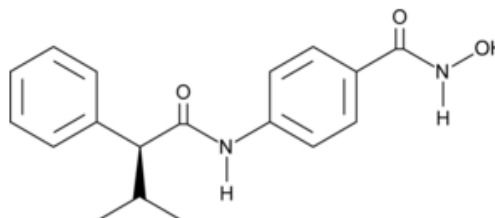


(S)-HDAC-42**Catalog #:** w37219**Lot #:** 120524**Size:** 1 mg**Structure:****CAS Registry #:** 935881-37-1**Purity:** ≥95%**Chemical Formula:** C₈H₂₀N₂O₃**Molecular Weight:** 312.4

Description: (S)-HDAC-42 is a strong inhibitor of HDACs. It decreases the viability of prostate cancer cell lines by increasing the expression of p21 and the acetylation of histone H3 while decreasing Akt phosphorylation and Bcl-XL expression. The inhibitor suppresses the growth of PC-3 tumor xenografts, reducing levels of phospho-Akt and Bcl-XL protein in tumors.

Appearance: A crystalline solid

Solubility: Soluble in ethanol, DMSO and DMF, which should be purged with an inert gas. Solubility in these solvents is ~20 mg/ml. For organic solvent-free aqueous solutions, prepare by directly dissolving the crystalline compound in aqueous buffers. Do not store aqueous solutions for more than one day.

Biological Activity: (S)-HDAC-42 inhibits HDACs with IC₅₀ = 16 nM *in vitro*.

Storage/Stability: Store at or below -20°C for up to two years.

Quality Control: The purity was determined by HPLC analysis.

References:

1. Lu, Q., *et al.*, *J. Med. Chem.* 2005; **48**: 5530-5535
2. Kulp, S.K., *et al.*, *Clin. Cancer Res.* 2006; **12(17)**: 5119-5206.