

# Resminostat (hydrochloride)

Catalog No: tcsc1522



## Available Sizes

**Size:** 10mg

**Size:** 50mg

**Size:** 100mg



## Specifications

**CAS No:**

1187075-34-8

**Formula:**

$C_{16}H_{20}ClN_3O_4S$

**Pathway:**

Epigenetics;Cell Cycle/DNA Damage

**Target:**

HDAC;HDAC

**Purity / Grade:**

>98%

**Solubility:**

DMSO :  $\geq 50$  mg/mL (129.58 mM)

**Alternative Names:**

RAS2410 hydrochloride;4SC-201 hydrochloride

**Observed Molecular Weight:**

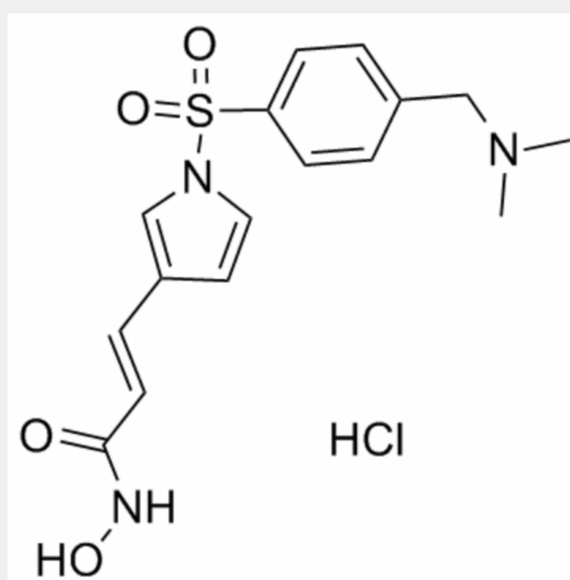
385.87

## Product Description

Resminostat hydrochloride is a potent inhibitor of **HDAC1**, **HDAC3** and **HDAC6**, with mean **IC<sub>50</sub>** values of 42.5, 50.1, 71.8 nM, respectively, and shows less potent activities against HDAC8, with an **IC<sub>50</sub>** of 877 nM.

IC50 & Target: IC50: 42.5 nM (HDAC1), 50.1 nM (HDAC3), 71.8 nM (HDAC6), 877 nM (HDAC8)<sup>[1]</sup>

**In Vitro:** Resminostat hydrochloride (Resminostat [HCl], 5  $\mu$ M) induces histone acetylation in myeloma cells. Resminostat hydrochloride displays a substrate competitive binding mode with a mean  $K_i$  value of 27 nM. Resminostat hydrochloride (5  $\mu$ M) induces histone hyperacetylation in myeloma cells. Resminostat inhibits cell growth, induces apoptosis and inhibits MM cell proliferation. Resminostat (5  $\mu$ M) also modulates expression of bcl-2 family proteins and inhibits Akt pathway signalling downstream of Akt. Resminostat exerts synergistic activity against myeloma cells when combined with common and new anti-myeloma agents<sup>[1]</sup>. Resminostat inhibits cell growth in head and neck squamous cell carcinoma cell lines, with  $IC_{50}$ s ranging from 0.775  $\mu$ M to 1.572  $\mu$ M ( $IC_{50}$  for SCC25: 0.775  $\mu$ M; CAL27: 1.572  $\mu$ M; and FaDu: 0.899  $\mu$ M). Resminostat (1.25 and 2.5  $\mu$ M) has a synergistic effect with irradiation on HNSCC cell lines. Resminostat in combination with cisplatin induces a downregulation of survivin. However, Resminostat shows no effect on Mcl-1 and p-AKT expression<sup>[2]</sup>. Resminostat reduces viability of HCC cells with the co-treatment of AZD-2014, with  $IC_{50}$ s ranging from  $0.89 \pm 0.12 \mu$ M to  $0.07 \pm 0.01 \mu$ M<sup>[3]</sup>.



All products are for RESEARCH USE ONLY. Not for diagnostic & therapeutic purposes!