

SW-100

## Chemical Properties

CAS No. : 2126744-35-0

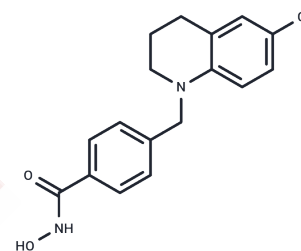
Formula: C<sub>17</sub>H<sub>17</sub>ClN<sub>2</sub>O<sub>2</sub>

Molecular Weight: 316.78

Store at low temperature

Storage: Powder: -20°C for 3 years | In solvent: -80°C for 1 year

Actual storage temperature shall be subject to the COA.



## Biological Description

Description	SW-100 is a selective histone deacetylase 6 inhibitor (IC <sub>50</sub> : 2.3 nM). It also shows at least 1000-fold selectivity for HDAC6 relative to all other HDAC isozymes. SW-100 displays an obviously improved ability to cross the blood-brain-barrier.
Targets(IC <sub>50</sub> )	HDAC
In vitro	SW-100 (0.01-10 μM; 48 hours) shows obvious enhance in the acetylated α-tubulin levels in a dose-dependent manner [1].
In vivo	In mouse model of Fragile X syndrome, SW-100 (20 mg/kg; i.p.; twice a day for two days) ameliorates several memory and learning impairments including novel object recognition, temporal ordering, and coordinate and categorical spatial processing [1].

## Solubility Information

Solubility	DMSO: 125 mg/mL (394.6 mM),Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)
In vivo Formulation	10% DMSO+40% PEG300+5% Tween 80+45% Saline: 4 mg/mL (12.63 mM),Sonication is recommended. <i>Please add the solvents sequentially, clarifying the solution as much as possible before adding the next one. Dissolve by heating and/or sonication if necessary. Working solution is recommended to be prepared and used immediately. The formulation provided above is for reference purposes only. In vivo formulations may vary and should be modified based on specific experimental conditions.</i>

### Preparing Stock Solutions

---

	1mg	5mg	10mg
1 mM	3.1568 mL	15.7838 mL	31.5676 mL
5 mM	0.6314 mL	3.1568 mL	6.3135 mL
10 mM	0.3157 mL	1.5784 mL	3.1568 mL
50 mM	0.0631 mL	0.3157 mL	0.6314 mL

---

Please select the appropriate solvent to prepare the stock solution, according to the solubility of the product in different solvents. Please use it as soon as possible.

Note: The dilution table applies only to solid products. For liquid products, please calculate the stock solution based on the stated concentration and/or density.

### Reference

Kozikowski AP, et al. Brain Penetrable Histone Deacetylase 6 Inhibitor SW-100 Ameliorates Memory and Learning Impairments in a Mouse Model of Fragile X Syndrome. ACS Chem Neurosci. 2019 Mar 20;10(3):1679-1695.

**Inhibitor · Natural Compounds · Compound Libraries · Recombinant Proteins**

This product is for Research Use Only · Not for Human or Veterinary or Therapeutic Use

Tel: 781-999-4286 E\_mail: info@targetmol.com Address: 34 Washington Street, Wellesley Hills, MA 02481