

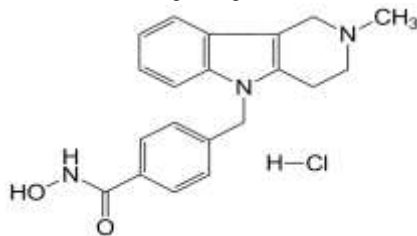
Tubastatin A

ALTERNATE NAME: *n*-Hydroxy-4-((2-methyl-3,4-dihydro-1H-pyrido[4,3-b]indol-5(2H-yl)methyl)benzamide

CATALOG #: 1724-1, 5

AMOUNT: 1 mg, 5 mg

STRUCTURE:



MOLECULAR FORMULA: C₂₀H₂₁N₃O₂·HCl

MOLECULAR WEIGHT: 371.86

CAS NUMBER: 1239262-52-5

APPEARANCE: Off-white solid

SOLUBILITY: DMSO (~90 mg/ml) or water (~ 4mg/ml) or 2% TWEEN-80/water (~2mg/ml) or 30% PEG (avg. MW = 400 g/mol)/50 mM phosphate buffer (pH = 2.25) (25 mg/ml) (heating is required to initially dissolve the compound).

PURITY: ≥95% by HPLC

STORAGE: Store at -20°C

DESCRIPTION: Cell-permeable, A potent and selective HDAC6 (histone deacetylase 6) inhibitor. Displays 1093-fold selectivity over HDAC1 (IC₅₀ values of 15 nM for HDAC6 vs 16.4 μM for HDAC1). Tubastatin A was substantially more selective than the known HDAC6 inhibitor Tubacin at all isozymes except HDAC8. In addition, it displayed over 1000-fold selectivity against all HDAC isoforms excluding HDAC8, where it displayed 54-fold selectivity. Tubastatin A displayed dose-dependent protection against HCA (homocysteic acid)-induced neuronal cell death starting at 5 μM with near complete protection at 10 μM.

REFERENCE: Butler, K.V., *et al.* (2010). *J. Am. Chem. Soc.* **132**, 10842-10846.

HANDLING: Do not take internally. Wear gloves and mask when handling the product! Avoid contact by all modes of exposure.

RELATED PRODUCTS:

- Apicidin (**Cat. No. 1601-1**)
- CI-994 (**Cat. No. 1742-10, 50**)
- DiscoveryPak™ HDAC Inhibitor Set (**Cat. No. K851-6**)
- M344 (**Cat. No. 1701-1**)
- MS-275 (Entinostat, MS-275) (**Cat. No. 1590-1,5**)
- Panobinostat (LBH589) (**Cat. No. 1612-1,5**)
- SAHA (**Cat. No. 1604-1**)
- Sodium 4-phenylbutyrate (**Cat. No. 1608-100,1000**)
- Sodium Butyrate (**Cat. No. 1609-1000**)
- Splitomycin (**Cat. No. 1610-5**)
- Trichostatin A (**Cat. No. 1606-1**)
- Valproic Acid, Sodium Salt (**Cat. No. 1647-200**)

FOR RESEARCH USE ONLY! Not to be used on humans.

