

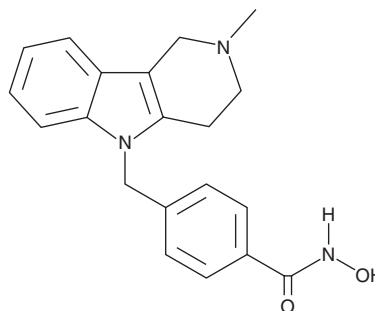
# PRODUCT INFORMATION



## Tubastatin A

Item No. 15785

**CAS Registry No.:** 1252003-15-8  
**Formal Name:** N-hydroxy-4-[(1,2,3,4-tetrahydro-2-methyl-5H-pyrido[4,3-b]indol-5-yl)methyl]-benzamide  
**MF:** C<sub>20</sub>H<sub>21</sub>N<sub>3</sub>O<sub>2</sub>  
**FW:** 335.4  
**Purity:** ≥95%  
**UV/Vis.:** λ<sub>max</sub>: 226 nm  
**Supplied as:** A crystalline solid  
**Storage:** -20°C  
**Stability:** ≥4 years



Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

### Laboratory Procedures

Tubastatin A is supplied as a crystalline solid. A stock solution may be made by dissolving the tubastatin A in the solvent of choice, which should be purged with an inert gas. Tubastatin A is soluble in organic solvents such as DMSO and dimethyl formamide. The solubility of tubastatin A in these solvents is approximately 2 and 1 mg/ml, respectively.

### Description

Tubastatin A is a potent HDAC6 inhibitor with an IC<sub>50</sub> value of 15 nM.<sup>1</sup> Comparatively, it demonstrates over 1,000-fold selectivity against all other HDAC isoforms (IC<sub>50</sub>s > 16 μM), excluding HDAC8 (IC<sub>50</sub> = 0.9 μM).<sup>1</sup> Tubastatin A induces α-tubulin hyperacetylation at 2.5 μM in primary cortical neuron cultures. In a model of oxidative stress induced by glutathione depletion, tubastatin A displays dose-dependent neuronal protection of primary cortical neuron cultures at 5-10 μM.<sup>1</sup>

### Reference

1. Butler, K.V., Kalin, J., Brochier, C., *et al.* Rational design and simple chemistry yield a superior, neuroprotective HDAC6 inhibitor, Tubastatin A. *J. Am. Chem. Soc.* **132(31)**, 10842-10846 (2010).

#### WARNING

THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

#### SAFETY DATA

This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the [complete](#) Safety Data Sheet, which has been sent via email to your institution.

#### WARRANTY AND LIMITATION OF REMEDY

Buyer agrees to purchase the material subject to Cayman's Terms and Conditions. Complete Terms and Conditions including Warranty and Limitation of Liability information can be found on our website.

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