

M344

Catalog #: 27203

Lot #: 120203

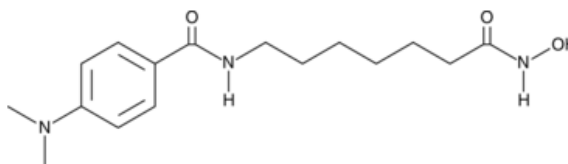
Size: 5 mg

Structure:

CAS Registry #: 251456-60-7

Purity: ≥98%

Chemical Formula: C₁₆H₂₅N₃O₃



Molecular Weight: 307.4

Description: M344 is a histone deacetylase (HDAC) inhibitor also known as D237 or MS 344. It inhibits human HDACs, and shows a three-fold selectivity for inhibition of HDAC6 over HDAC1. M344 has been found to increase the sensitivity of human squamous carcinoma cells to radiation. It has also been found to promote cell cycle arrest and apoptosis in human ovarian cancer cells and endometrial cancer. M344 can also inhibit maize HDAC.

Appearance: A crystalline solid

Solubility: Soluble in ethanol is ~3 mg/ml and ~25 mg/ml in DMSO and DMF. For biological experiments, dilute the organic solvent into aqueous buffers or isotonic saline. Do not store in aqueous solution for more than one day.

Biological Activity: M344 inhibits human HDAC6 with an IC₅₀ of ~14 nM and HDAC1 at ~46 nM.

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

Quality Control: The purity was determined by HPLC analysis.

References:

1. Jung, M., *et al.*, *J. Med. Chem.* 1999; **42**: 4669-4679.
2. Remiszewski, S., *et al.*, *J. Med. Chem.* 2002; **45(4)**: 753-757.
3. Heltweg, B., *et al.*, *J. Med. Chem.* 2004.; **47**: 5235-5243.