

MS-275

Catalog No: 14042, 14043

Format: 25 mg, 5 mg

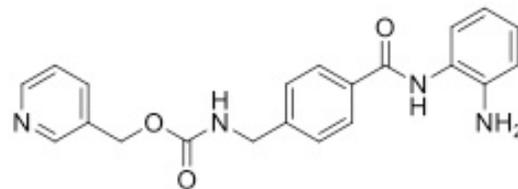
Chemical Properties:

MW = 376.4

C₂₁H₂₀N₄O₃

CAS 209783-80-2

Physical Properties: Pale yellow powder

Names: MS-275, Entinostat, Pyridin-3-ylmethyl 4-((2-aminophenyl) carbamoyl)benzylcarbamate

Pharmacology: A potent and selective non-hydroxamate HDAC inhibitor. Considered to be a class I selective inhibitor but displays some selectivity amongst class I members; HDAC1 (IC₅₀ = 0.3 M); HDAC3 (IC₅₀ = 8 M) with no inhibition of HDAC 8 (at > 100 M) (ref 1). Induces hyperacetylation of nuclear histones in tumor cells resulting in inhibition of proliferation of a variety of human tumor cell lines (ref 2). Protects p53-deficient mice against ischemic injury (ref 3). Suppresses the p38 MAP kinase pathway in rheumatoid arthritic synovial fibroblasts (ref 4). Active *in vivo*.

Solubilization: May be dissolved in DMSO (25 mg/ml, warm)

Fluorescent Properties: N/A

Quality Control:

≥98% (TLC); NMR (Conforms)

References:

1. E Hu *et al. J. Pharmacol. Exp. Ther.* 2003, 307:720
2. A Saito *et al. Proc. Natl. Acad. Sci. USA* 1999, 96:4592
3. SP Murphy *et al. J. Neurochem.* 2013, Oct 21 epub
4. QY Choo *et al. Molecules* 2013, 18:14085

Storage and Guarantee: Store desiccated as supplied at -20°C for up to 1 year. Store solutions at -20°C for up to 1 week. This product is guaranteed for 6 months from date of arrival.