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). Supresses 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:**  
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.