

 Phone:
 888-558-5227

 651-644-8424

 Fax:
 888-558-7329

 Email:
 getinfo@lktlabs.com

 Web:
 lktlabs.com

Product Information

Product ID E5477

CAS No. 209783-80-2

Chemical Name N-[[4-[[(2-Aminophenyl)amino]carbonyl]phenyl]methyl]carbamic acid 3-pyridinylmethyl ester

Synonym SNDX-275, MS-275, MS275

Formula C₂₁H₂₀N₄O₃ Formula Wt. 376.41 Melting Point 159-160°C Purity ≥98% Solubility



Bulk quanitites available upon request

Product ID	Size
E5477	1 mg
E5477	5 mg
E5477	25 mg
E5477	100 mg

Store Temp Ambient

Ship Temp Ambient

Description Entinostat is a benzamide derivative that inhibits histone deacetylase 1 (HDAC1); entinostat exhibits anticancer chemotherapeutic, anti-metastatic, and neuroprotective properties. In vitro, entinostat increases transcription of E-cadherin and decreases transcription of N-cadherin, decreasing tubulin-based microtentacles, reversing epithelial-to-mesenchymal transition (EMT) and inhibiting cell migration. In cellular and animal models, this compound upregulates natural killer cell activating receptor NKG2D, increasing the ability of natural killer cells to destroy cancer cells. Additionally, entinostat downregulates cellular FLICE-inhibiting protein (c-FLIP), increasing caspase activation and inducing apoptosis in animal models. Inhibition of HDAC1 in the nucleus accumbens (NAcc) inhibits cocaine-induced plasticity and behavioral changes in rodent models. Entinostat also decreases amyloid-β (Aβ) deposition in the hippocampus and cortex of animal models.

References Shah P, Gau Y, Sabnis G. Histone deacetylase inhibitor entinostat reverses epithelial to mesenchymal transition of breast cancer cells by reversing the repression of E-cadherin. Breast Cancer Res Treat. 2013 Dec 5. [Epub ahead of print]. PMID: 24305977.

Zhu S, Denman CJ, Cobanoglu ZS, et al. The Narrow-Spectrum HDAC Inhibitor Entinostat Enhances NKG2D Expression Without NK Cell Toxicity, Leading to Enhanced Recognition of Cancer Cells. Pharm Res. 2013 Nov 8. [Epub ahead of print]. PMID: 24203492.

Kennedy PJ, Feng J, Robison AJ, et al. Class I HDAC inhibition blocks cocaine-induced plasticity by targeted changes in histone methylation. Nat Neurosci. 2013 Apr;16(4):434-40. PMID: 23475113.

Rao-Bindal K, Koshkina NV, Stewart J, et al. The histone deacetylase inhibitor, MS-275 (entinostat), downregulates c-FLIP, sensitizes osteosarcoma cells to FasL, and induces the regression of osteosarcoma lung metastases. Curr Cancer Drug Targets. 2013 May;13(4):411-22. PMID: 23410027.

Zhang ZY, Schluesener HJ. Oral administration of histone deacetylase inhibitor MS-275 ameliorates neuroinflammation and cerebral amyloidosis and improves behavior in a mouse model. J Neuropathol Exp Neurol. 2013 Mar;72(3):178-85. PMID: 23399896.

Caution: This product is intended for laboratory and research use only. It is not for human or drug use.