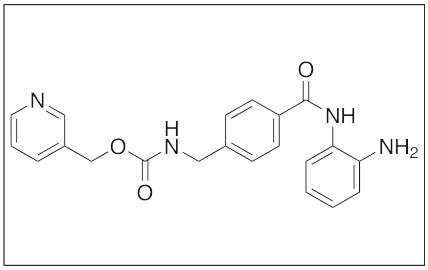
LKT Laboratories, Inc.

Entinostat

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 $C_{21}H_{20}N_4O_3$
Formula Wt. 376.41
Melting Point 159-160°C
Purity ≥98%
Solubility

Store Temp Ambient
Ship Temp Ambient

Pricing and Availability

Bulk quanitites available upon request

Product ID	Size	List Price
E5477	1 mg	$33.10
E5477	5 mg	$82.70
E5477	25 mg	$237.10
E5477	100 mg	$661.50

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 (Aß) deposition in the hippocampus and cortex of animal models. TEST!!!!!!

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.