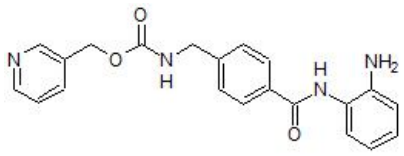
abcam

Product datasheet

Entinostat (MS-275) ab142053

Overview

Product name	Entinostat (MS-275)
Description	HDAC1 and HDAC3 inhibitor
Biological description	Benzamide derivative that inhibits histone deacetylase 1 (HDAC1) and HDAC2. Not active against HDAC4, 6, 8 and 10 (IC_{50} >100µM). Exhibits anticancer chemotherapeutic, anti-metastatic, and neuroprotective properties. *In vitro*, it 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. Upregulates natural killer cell activating receptor NKG2D. Increases ability of natural killer cells to destroy cancer cells. Down regulates 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. Decreases amyloid-beta (Abeta) deposition in the hippocampus and cortex of animal models.
Purity	> 99%
CAS Number	209783-80-2
Chemical structure	

Properties

Chemical name	Pyridin-3-ylmethyl N-[[4-[(2-aminophenyl)carbamoyl]phenyl]methyl]carbamate
Molecular weight	376.41
Molecular formula	$C_{21}H_{20}N_4O_3$
PubChem identifier	4261
Storage instructions	Shipped at Room Temperature. Store at Room Temperature.
Solubility overview	Soluble in DMSO to 100 mM
Handling	Wherever possible, you should prepare and use solutions on the same day. However, if you need to make up stock solutions in advance, we recommend that you store the solution as aliquots in tightly sealed vials at -20°C. Generally, these will be useable for up to one month. Before use, and prior to opening the vial we recommend that you allow your product to equilibrate to room temperature for at least 1 hour.

	Toxic, refer to SDS for further information. Need more advice on solubility, usage and handling? Please visit our frequently asked questions (FAQ) page for more details.
SMILES	C1=CC=C(C(=C1)N)NC(=O)C2=CC=C(C=C2)CNC(=O)OCC3=CN=CC=C3
Source	Synthetic

Please note: All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES, NOT FOR USE IN HUMANS"

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