Cat No. 92-Y43

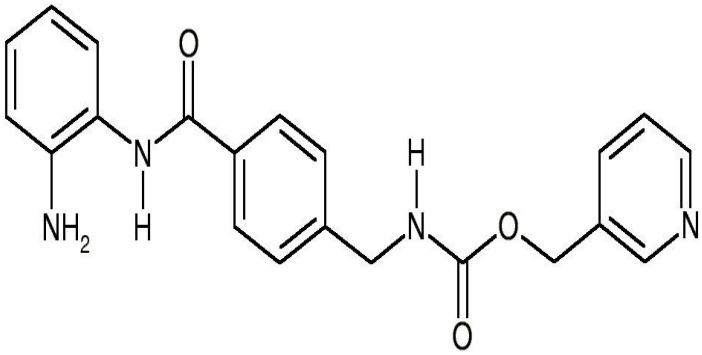
MS-275

10 mg

For research purposes only

MS-275 is a potent HDAC inhibitor with an IC50 of 0.3 and 8µM for HDAC1 and HDAC3. It has been shown to inhibit tumor growth by inducing tumor suppressors p21WAF1/CIP1 and gelsolin through the acetylation of histones and changing cell cycle distribution. MS-275 has been shown to exert dose-dependent effects in human leukemia cells at low concentrations in human prostate cancer lines. MS-275 inhibits proliferation of various human tumor cell lines and inhibits the growth of human tumor xenographs in the nude mouse.

TECHNICAL INFORMATION



Other Names: MS-27-275, MS 275-27, Histone Deacetylase Inhibitor I, SNDX-275, Entinostat

Chemical Formula: $C_{21}H_{20}N_4O_3$

CAS Number: 209783-80-2

Molecular Weight: 376.41

Purity: >98%

Appearance: a crystalline solid

Solubility: DMSO

STORAGE AND HANDLING

Storage: Store at 4°C and protected from light. Following reconstitution, store aliquots at -20°C.

Stability: Stock solutions stable at -20°C for up to 2 years.

Shipping Conditions: Shipped at room temperature.

PRODUCT USE

Soluble in DMSO at 25 mg/ml with slight warming. If precipitate is observed, vortex for 5 minutes. For most cells, the maximum tolerance to DMSO is less than 0.5%.

REFERENCES

1. Saito et al. (1999) A synthetic inhibitor of histone deacetylase, MS-27-275, with marked in vivo antitumor activity against human tumors. Proc. Natl. Acad. Sci. USA 96(8):4592-7.
2. Lee et al. (2001) MS-275, a histone deacetylase inhibitor, selectively induces transforming growth factor beta type II receptor expression in human breast cancer cells. Cancer Res. 61(3):931-34.
3. Kato et al. (2007) Synergistic in vivo antitumor effect of the histone deacetylase inhibitor MS-275 in combination with interleukin 2 in a murine model of renal cell carcinoma. Clin Cancer Res. 13(15):4538-46.