Cat No. 16-K74

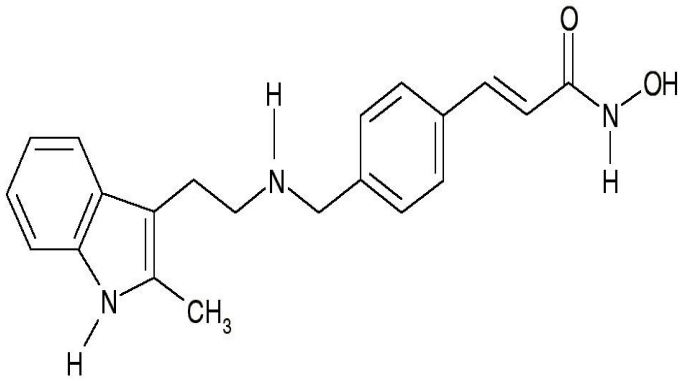
LBH589

10 mg

For research purposes only

LBH589 (Panobinostat) is a novel HDAC inhibitor that has been shown to induce acetylation of histone H3 and H4, increase p21 levels and disrupt the chaperone function of hsp90. LBH589 induces G(2) M Cell cycle arrest and inhibits HUVEC proliferation and viability. At noncytotoxic concentrations. LBH589 inhibits AKT activity, endothelial tube formation and Matrigel invasion. LBH589 shows anti-tumor activity when used in multiple myeloma and castrate-resistant prostate cancer cell lines. It is currently being tested in humans against cultaneous T cell lymphoma, breast cancer, prostate cancer and chronic myelogenous leukemia.

TECHNICAL INFORMATION



Other Names: Faridak, Panobinostat, NVP-LBH-589

Chemical Formula: $C_{21}H_{23}N_3O_2$

CAS Number: 404950-80-7

Molecular Weight: 349.43

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 200 mg/ml. If precipitate is observed, vortex for 5 minutes. For most cells, the maximum tolerance to DMSO is less than 0.5%.

REFERENCES

1. Qian et al. (2006) Targeting tumor angiogenesis with histone deacetylase inhibitors: the hydroxamic acid derivative LBH589. Clin Cancer Res. 12(2):634-42.
2. George et al. (2005) Combination of the histone deacetylase inhibitor LBH589 and the hsp90 inhibitor 17-AAG is highly active against human CML-BC cells and AML cells with activating mutation of FLT-3. Blood. 105(4):1768-76.
3. Vilas-Zornoza et al. (2012) Preclinical activity of LBH589 alone or in combination with chemotherapy in a xenogeneic mouse model of human acute lymphoblastic leukemia. Leukemia. Feb 6. doi: 10.1038/leu.2012.31.