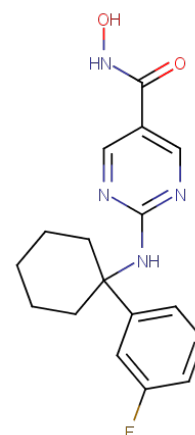


Catalog Number: CM04392

产品信息

Catalog Number:
CM04392CAS号:
1375466-18-4分子式:
 $C_{17}H_{19}FN_4O_2$ 主要靶点:
HDAC主要通路:
表观遗传|DNA 损伤和修复分子量:
330.36溶解度:
DMSO:100 mg/mL (302.70 mM)

靶点活性

HDAC1:2123 nM|HDAC6:7.5 nM

体外活性

Upon treatment with ACY-775, a clear enhancement of the acetylation of α -tubulin is visible, while histone acetylation remains unaltered. Acetylation of α -tubulin is visualized by immunofluorescence and the intensity in the neurites of the neurons is quantified and normalized to the length of the fluorescent signal. In vehicle-treated DRG neurons, acetylated α -tubulin is already present. Upon treatment with ACY-775, the signal intensity of acetylated α -tubulin increases significantly. A significant increase in motility of mitochondria and also the total number of mitochondria within the neurites are observed compared with vehicle-treated DRG neurons. A significantly higher number of retrogradely transport mitochondria is observed in DRG neurons treated with ACY-775 compared with vehicle-treated cells [1].

体内活性

Biodistribution profiles of ACY-775 are examined after acute dosing at 5 or 50 mg/kg over 2 h. At t=30 min after acute 50 mg/kg injection, respective plasma levels of ACY-775 is 1359 ng/mL (4.1 μ M). Elimination from the plasma is rapid, with a plasmatic half-life of 12 min and a concentration below 10 ng/mL after 2 h. When ACY-775 (50 mg/kg) is administered repeatedly in wild-type mice at 24 h, 4 h, and 30 min before killing, significant increases in α -tubulin acetylation are observed in all tested brain regions [2].

动物实验

Mice are tested for immobility in the TST. At 30 min or 2 h after i.p. injection of ACY-738 (5, 50 mg/kg), ACY-775 (5, 50 mg/kg), and citalopram (0.5, 2, 20 mg/kg), a combination of the previous, or vehicle, mice are attached to the test rig and time immobile over 6 min is recorded. For open-field activity, mice are injected with ACY-738 or ACY-775 at 5, 10, or 50 mg/kg or vehicle and allowed to explore [2].

细胞实验

Undifferentiated RN46A-B14 cells are grown. They are treated with 2.5 μ M ACY-738, ACY-775, tubastatin A, 0.6 μ M TSA or vehicle (0.1% DMSO) for 4 h. Samples are processed using a histone extraction kit and quantified using protein assay [2].

储存

Powder: -20°C for 3 years | In solvent: -80°C for 1 year | Shipping with blue ice.