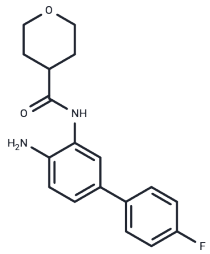
Data Sheet (Cat.No.T23821)

TargetMol

BRD4884

Chemical Properties



CAS No. : 1404559-91-6

Formula: C18H19FN2O2

Molecular Weight: 314.35

Storage: Store at low temperature
Powder: -20°C for 3 years | In solvent: -80°C for 1 year
Actual storage temperature shall be subject to the COA.

Biological Description

Description	BRD4884 is a highly selective and efficient HDAC1 and HDAC2 inhibitor that also inhibits HDAC3, used in research on neurological disorders.
Targets(IC50)	HDAC
In vitro	BRD4884 is a potent HDAC inhibitor with IC50 values of 29 nM, 62 nM, and 1.09 μM for HDAC1, 2, and 3, respectively. BRD4884 (10 μM for 24 hours) increased acetylation of histone H4K12 and H3K9 in mouse forebrain primary neuron cultures. [1]
In vivo	BRD4884 has a half-life of 0.9 hours in mice and has good brain permeability. BRD4884 (10 and 1 mg/kg, intraperitoneal injection) salvaged memory deficits associated with P25-induced neurodegeneration in situational fear conditioning. [1]

Solubility Information

Solubility	DMSO: 20 mg/mL (63.62 mM),Sonication and heating are recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	3.1812 mL	15.9058 mL	31.8117 mL
5 mM	0.6362 mL	3.1812 mL	6.3623 mL
10 mM	0.3181 mL	1.5906 mL	3.1812 mL
50 mM	0.0636 mL	0.3181 mL	0.6362 mL

Please select the appropriate solvent to prepare the stock solution, according to the solubility of the product in different solvents. Please use it as soon as possible.

Note: The dilution table applies only to solid products. For liquid products, please calculate the stock solution based on the stated concentration and/or density.

Reference

Wagner FF, et al. Kinetically Selective Inhibitors of Histone Deacetylase 2 (HDAC2) as Cognition Enhancers. Chem Sci. 2015 Jan 1;6(1):804-815.
Wagner FF, et al. Kinetic and structural insights into the binding of histone deacetylase 1 and 2 (HDAC1, 2) inhibitors. Bioorg Med Chem. 2016 Sep 15;24(18):4008-4015.