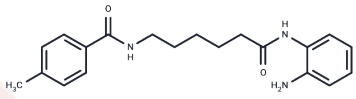
Data Sheet (Cat.No.T6639)

TargetMol

RG2833

Chemical Properties



CAS No. : 1215493-56-3

Formula: C20H25N3O2

Molecular Weight: 339.43

Storage: 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	RG2833 (RGFP109) (RGFP109), a brain-penetrant HDAC inhibitor, is with IC50 of 60 nM and 50 nM for HDAC1 and HDAC3, respectively.
Targets(IC50)	HDAC
In vitro	In unstimulated peripheral blood mononuclear cells, RG2833 upregulates the level of the synaptic mRNA and protein in a dose-dependent manner.
Kinase Assay	Aconitase activities are determined by homogenization of mouse brain tissues on ice at 10% w/v in CellLytic MT Mammalian Tissue Lysis/Extraction buffer, followed by centrifugation at 800×g?for 10?min at 4°C. Tissue lysates (50?µL) are then added to 200?µL of substrate mix (50?mM Tris/HCl pH 7.4, 0.4?mM NADP, 5?mM Na citrate, 0.6?mM MgCl2, 0.1% (v/v) Triton X-100 and 1U isocitrate dehydrogenase) and the reactions are incubated at 37°C for 15?min, followed by spectrophotometric absorbance measurements every minute for 15?min at 340?nm 37°C to determine the reaction slope. Aconitase activities of mouse brain tissues are then normalized to citrate synthase activities, which are determined using a citrate synthase assay kit.

Solubility Information

Solubility	DMSO: 125 mg/mL (368.26 mM),Sonication is recommended. Ethanol: 10 mg/mL (29.46 mM),Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)
In vivo Formulation	10% DMSO+40% PEG300+5% Tween 80+45% Saline: 2 mg/mL (5.89 mM),Sonication is recommended. 10% DMSO+90% Saline: 10 mg/mL (29.46 mM),Suspension. *Please add the solvents sequentially, clarifying the solution as much as possible before adding the next one. Dissolve by heating and/or sonication if necessary. Working solution is recommended to be prepared and used immediately. The formulation provided above is for reference purposes only. In vivo formulations may vary and should be modified based on specific experimental conditions.*

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	2.9461 mL	14.7306 mL	29.4612 mL
5 mM	0.5892 mL	2.9461 mL	5.8922 mL
10 mM	0.2946 mL	1.4731 mL	2.9461 mL
50 mM	0.0589 mL	0.2946 mL	0.5892 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

Rai M, et al. PLoS One. 2010, 5(1), e8825.
Sandi C, et al. Neurobiol Dis. 2011, 42(3), 496-505.
Johnston TH, et al. Parkinsonism Relat Disord. 2013, 19(2), 260-264.