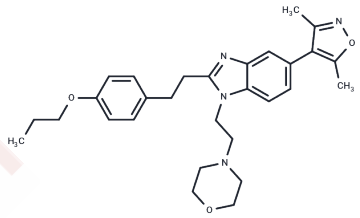
Data Sheet (Cat.No.T3973)

PF-CBP1

Chemical Properties



CAS No. : 1962928-21-7

Formula: C29H36N4O3

Molecular Weight: 488.62

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	PF-CBP1 HCl is a highly selective inhibitor of the bromodomain of CREB-binding protein (CREBBP). It inhibits CREBBP (IC50: 125 nM) and p300 bromodomains (IC50: 363 nM).
Targets(IC50)	Epigenetic Reader Domain
In vitro	PF-CBP1 modulates key inflammatory genes in primary macrophages, downregulates RGS4 in neurons (a target linked to Parkinson's disease), and exhibits 139-fold selectivity over BRD4 in biochemical assays and >105-fold selectivity by ITC. PF-CBP1 is a potent EP300 inhibitor with no cytotoxicity in macrophages and no hepatotoxicity in cell-based models at non-toxic concentrations.
Cell Research	Cells are pretreated with the probes PF-CBP1, ISOX-INACT, or ISOX-DUAL starting at 10 μM concentrations, and then serially diluted to 0.1 μM. After 30 min, the cells are treated with LPS to induce gene transcription and the expression levels of interleukin-6 (IL-6), IL-1β, and interferon-β (IFN-β)(which are known to be induced after 4 h of LPS exposure) are analyzed by RT-PCR. Probe PF-CBP1 moderately reduces LPS-induced IL-6 and IFN-β expression at 10 μM, and a decrease in IL-1β expression is evident at 3 μM. (Only for Reference)

Solubility Information

Solubility	DMSO: 50 mg/mL (102.33 mM),Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	2.0466 mL	10.2329 mL	20.4658 mL
5 mM	0.4093 mL	2.0466 mL	4.0932 mL
10 mM	0.2047 mL	1.0233 mL	2.0466 mL
50 mM	0.0409 mL	0.2047 mL	0.4093 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

Eugene L, et al. Chem Biol. 2015, 22(12):1588-1596.