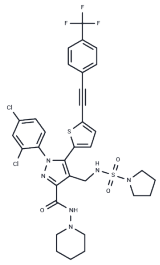
Data Sheet (Cat.No.T5996)

TargetMol

CB1-IN-1

Chemical Properties



CAS No. : 1429239-98-4

Formula: C33H31Cl2F3N6O3S2

Molecular Weight: 751.67

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	CB1-IN-1 (DBPR211) is a peripherally restricted CB1R antagonist, for CB1R and CB2R with Ki of 0.3 nM and 21 nM,respectively.
Targets(IC50)	Cannabinoid Receptor

Solubility Information

Solubility	DMSO: 11 mg/mL (14.63 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 (2.66 mM),Sonication is recommended. *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	1.3304 mL	6.6519 mL	13.3037 mL
5 mM	0.2661 mL	1.3304 mL	2.6607 mL
10 mM	0.133 mL	0.6652 mL	1.3304 mL
50 mM	0.0266 mL	0.133 mL	0.2661 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

Chang C P , Wu C H , Song J S , et al. Discovery of 1-(2,4-dichlorophenyl)-N-(piperidin-1-yl)-4-((pyrrolidine-1-sulfonamido)methyl)-5-(5-((4-(trifluoromethyl)phenyl)ethynyl)thiophene-2-yl)-1H-pyrazole-3-carboxamide as a novel peripherally restricted cannabinoid-1 receptor antagonist with significant weight-loss efficacy in diet-induced obese mice.[J]. Journal of Medicinal Chemistry, 2013, 56(24):9920.

Li P, Lin Q, Sun S, et al. Inhibition of cannabinoid receptor type 1 sensitizes triple-negative breast cancer cells to ferroptosis via regulating fatty acid metabolism. Cell Death & Disease. 2022, 13(9): 1-15.

Chang C P , Huang H L , Huang J K , et al. Fluorine-18 Isotope Labeling for Positron Emission Tomography Imaging. Direct Evidence for DBPR211 as a Peripherally Restricted CB1 Inverse Agonist[J]. Bioorganic & Medicinal Chemistry, 2018.