Data Sheet (Cat.No.T4478)

CID 16020046

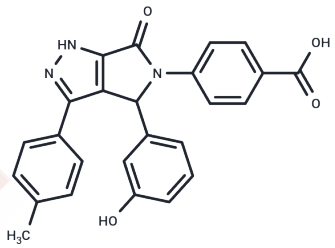
Chemical Properties

CAS No. : 834903-43-4

Formula: C25H19N3O4

Molecular Weight: 425.44

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	CID 16020046 (C390-0219) is a selective GPR55 antagonist, inhibiting GPR55 constitutive activity with IC50 of 0.15 μM in yeast.
Targets(IC50)	Cannabinoid Receptor
In vitro	In yeast cells expressing human GPR55, CID16020046 inhibited agonist-induced receptor activation. In human embryonic kidney (HEK293) cells stably expressing human GPR55, CID16020046 behaved as an antagonist on LPI-mediated Ca2+ release and extracellular signal-regulated kinases activation, but not in HEK293 cells expressing cannabinoid receptor 1 or 2 (CB1 or CB2). CID16020046 dose-dependently inhibited lysophosphatidylinositol (LPI)-induced activation of nuclear factor of activated T-cells (NFAT), nuclear factor κ of activated B cells (NF-κB) and serum response element, translocation of NFAT and NF-κB, and GPR55 internalization [1].

Solubility Information

Solubility	DMSO: 125 mg/mL (293.81 mM),Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)
In vivo Formulation	10% DMSO+90% Saline: < 10 mg/mL (23.51 mM),Lower concentrations may be soluble, but exact solubility limit is unknown. 10% DMSO+40% PEG300+5% Tween 80+45% Saline: 10 mg/mL (23.51 mM),Solution. *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	2.3505 mL	11.7525 mL	23.5051 mL
5 mM	0.4701 mL	2.3505 mL	4.701 mL
10 mM	0.2351 mL	1.1753 mL	2.3505 mL
50 mM	0.047 mL	0.2351 mL	0.4701 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

Kargl J, et al. A selective antagonist reveals a potential role of G protein-coupled receptor 55 in platelet and endothelial cell function. J Pharmacol Exp Ther. 2013 Jul;346(1):54-66.