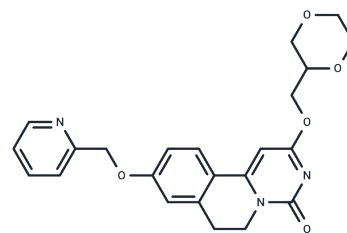


GPR84 antagonist 8

Chemical Properties

CAS No. : 1445846-30-9
Formula: C₂₃H₂₃N₃O₅
Molecular Weight: 421.45
Appearance: no data available
Storage: Powder: -20°C for 3 years | In solvent: -80°C for 1 year



Biological Description

Description	GPR84 antagonist 8 is a selective GPR84 antagonist.
Targets(IC50)	GPR
In vitro	GPR84 antagonist 8 is shown to effectively counteract the decrease in cAMP production triggered by 6-OAU in GPR84-CHO cells, hinting at its ability to inhibit GPR84's action. To examine its potential in mitigating GPR84 activation's pro-inflammatory effects in macrophages, bone marrow-derived macrophages (BMDMs) pretreated with LPS were exposed to 10μM of the antagonist for 30 minutes prior to the introduction of 1μM 6-OAU. Western Blot analysis indicated that GPR84 antagonist 8 notably reduces the phosphorylation of AKT and ERK prompted by 6-OAU, showcasing its partial blockade. Given GPR84's prominence in immune cells as part of the G protein-coupled receptor family associated with metabolism, utilizing GPR84 antagonist 8 emerges as a promising anti-inflammatory approach against various inflammatory diseases. The antagonist's effectiveness and specificity were further validated through cAMP assay trials conducted on GPR84-CHO cells.

Solubility Information

Solubility	DMSO: 5 mg/mL (11.86 mM), Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)
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Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	2.3728 mL	11.8638 mL	23.7276 mL
5 mM	0.4746 mL	2.3728 mL	4.7455 mL
10 mM	0.2373 mL	1.1864 mL	2.3728 mL
50 mM	0.0475 mL	0.2373 mL	0.4746 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.

Reference

Recio C, et al. Activation of the Immune-Metabolic Receptor GPR84 Enhances Inflammation and Phagocytosis in Macrophages. Front Immunol. 2018 Jun 20;9:1419.

Inhibitor · Natural Compounds · Compound Libraries · Recombinant Proteins

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Tel: 781-999-4286 E_mail: info@targetmol.com Address: 36 Washington Street, Wellesley Hills, MA 02481