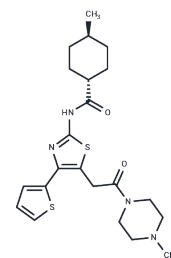


GPR81 agonist 1

Chemical Properties

CAS No. :	1620992-67-7
Formula:	C22H30N4O2S2
Molecular Weight:	446.63
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	GPR81 agonist 1 is a potent and selective GPR81 agonist with high affinity for human and mouse GPR81, inhibiting lipolysis of differentiated 3T3-L1 adipocytes, improving insulin sensitivity and glycaemic control in mouse models of insulin resistance and diabetes, and can be used in the study of diabetes and obesity.
Targets(IC50)	GPCR,HCAR
In vitro	GPR81 agonist 1 (1-1000 nM) inhibits fat breakdown in differentiated 3T3-L1 adipocytes [1].
In vivo	GPR81 agonist 1, when administered intraperitoneally at a dose of 100 mg/kg, inhibits fat breakdown in mice without causing skin flushing and exhibits good bioavailability[1].

Solubility Information

Solubility	DMSO: 30 mg/mL (67.17 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 (4.48 mM),Sonication is recommended. <i>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.</i>

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	2.239 mL	11.1949 mL	22.3899 mL
5 mM	0.4478 mL	2.239 mL	4.478 mL
10 mM	0.2239 mL	1.1195 mL	2.239 mL
50 mM	0.0448 mL	0.2239 mL	0.4478 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

Sakurai T, et al. Identification of a novel GPR81-selective agonist that suppresses lipolysis in mice without cutaneous flushing. *Eur J Pharmacol.* 2014;727:1-7.

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Tel:781-999-4286 E_mail:info@targetmol.com Address:34 Washington Street,Wellesley Hills,MA 02481