

GSK205

Chemical Properties

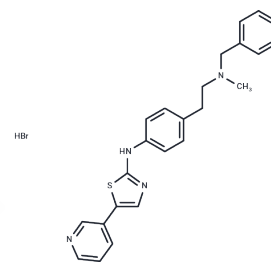
CAS No. : 1263068-83-2

Formula: C₂₄H₂₅BrN₄S

Molecular Weight: 481.45

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	GSK205 is a selective TRPV4 antagonist that blocks Ca(2+) signaling and may be used to reduce inflammation and pain.
Targets(IC50)	Calcium Channel, TRP/TRPV Channel
In vitro	In T3-F442A adipocytes, GSK205 (5 μM; 4 days) resulted in increased expression of thermogenic genes and was accompanied by a decrease in the proinflammatory gene program[1].
In vivo	In male C57BL/6J mice on a high-fat diet, GSK205 (10 mg/kg; intraperitoneal injection; twice daily; for 7 days) caused a reduced expression of proinflammatory chemokines, macrophage markers, and Tnfa in EPI fat. It also significantly improved glucose tolerance in diet-induced obese (DIO) mice[1].

Solubility Information

Solubility	DMSO: 100 mg/mL (207.71 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: 4 mg/mL (8.31 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	2.0771 mL	10.3853 mL	20.7706 mL
5 mM	0.4154 mL	2.0771 mL	4.1541 mL
10 mM	0.2077 mL	1.0385 mL	2.0771 mL
50 mM	0.0415 mL	0.2077 mL	0.4154 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

Ye L, et al. TRPV4 is a regulator of adipose oxidative metabolism, inflammation, and energy homeostasis. *Cell*. 2012 Sep 28;151(1):96-110.

Kanju P, et al. Small molecule dual-inhibitors of TRPV4 and TRPA1 for attenuation of inflammation and pain. *Sci Rep*. 2016 Jun 1;6:26894.

Inhibitor · Natural Compounds · Compound Libraries · Recombinant Proteins

This product is for Research Use Only · Not for Human or Veterinary or Therapeutic Use

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