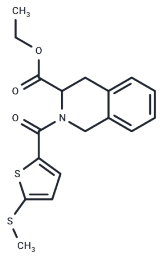
Data Sheet (Cat.No.T7837)

SR8278

Chemical Properties



CAS No. : 1254944-66-5

Formula: C18H19NO3S2

Molecular Weight: 361.48

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	SR8278 is an REV-ERBα antagonist(EC50 = 0.47 μM), blocking activation of the receptor by the synthetic agonist GSK 4112
Targets(IC50)	Others,REV-ERB
In vitro	SR8278 stimulates the expression of two REV-ERBα target genes involved in the regulation of glucose production, glucose 6-phosphatase and phosphoenolpyruvate carboxykinase, in liver cells[1]

Solubility Information

Solubility	DMSO: 12.82 mg/mL (35.47 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 (5.53 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	2.7664 mL	13.832 mL	27.664 mL
5 mM	0.5533 mL	2.7664 mL	5.5328 mL
10 mM	0.2766 mL	1.3832 mL	2.7664 mL
50 mM	0.0553 mL	0.2766 mL	0.5533 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

Kojetin D , Wang Y , Kamenecka T M , et al. Identification of SR8278, a Synthetic Antagonist of the Nuclear Heme Receptor REV-ERB[J]. Acs Chemical Biology, 2011, 6(2):131-134.
Zhong D, Chen J, Qiao R, et al.Genetic or pharmacologic blockade of mPGES-2 attenuates renal lipotoxicity and diabetic kidney disease by targeting Rev-Erbα/FABP5 signaling.Cell Reports.2024, 43(4).
Dong D , Sun H , Wu Z , et al. A validated ultra-performance liquid chromatography-tandem mass spectrometry method to identify the pharmacokinetics of SR8278 in normal and streptozotocin-induced diabetic rats[J]. Journal of Chromatography B, 2016, 1020:142-147.