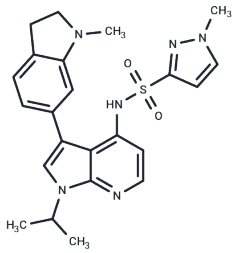
Data Sheet (Cat.No.T15433)

GSK2795039

Chemical Properties



CAS No. : 1415925-18-6

Formula: C23H26N6O2S

Molecular Weight: 450.56

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	GSK2795039 inhibits reactive oxygen species (ROS) production and NADPH consumption. GSK2795039 decreases apoptosis. GSK2795039 is an inhibitor of NADPH oxidase 2 (NOX2) (pIC50: 6 in different cell-free assays).
Targets(IC50)	Apoptosis,Reactive Oxygen Species,NADPH,ROS
In vitro	GSK2795039 (25 μM; 24 hours) mitigates FeSO4 and LPS-induced apoptosis and reduces caspase-3-positive PC12 cells[2].
In vivo	GSK2795039 (intraperitoneal injection; 100 mg/kg; 1 hour prior) reduces activity in a murine acute pancreatitis model and decreases serum amylase levels induced by systemic cerulein injection[1].

Solubility Information

Solubility	DMSO: 250 mg/mL (554.87 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 (4.44 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	2.2195 mL	11.0973 mL	22.1946 mL
5 mM	0.4439 mL	2.2195 mL	4.4389 mL
10 mM	0.2219 mL	1.1097 mL	2.2195 mL
50 mM	0.0444 mL	0.2219 mL	0.4439 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

Hirano K, et al. Discovery of GSK2795039, a Novel Small Molecule NADPH Oxidase 2 Inhibitor. Antioxid Redox Signal. 2015 Aug 10;23(5):358-74.

Zhan Y, Chen Q, Song Y, et al. Berbamine Hydrochloride inhibits lysosomal acidification by activating Nox2 to potentiate chemotherapy-induced apoptosis via the ROS-MAPK pathway in human lung carcinoma cells. Cell Biology and Toxicology. 2022: 1-21

Yauger YJ, et al. Iron accentuated reactive oxygen species release by NADPH oxidase in activated microglia contributes to oxidative stress in vitro. J Neuroinflammation. 2019 Feb 18;16(1):41.