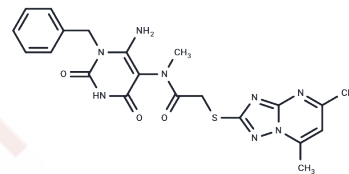


Anti-inflammatory agent 49

Chemical Properties

CAS No. :	851471-44-8
Formula:	C ₂₁ H ₂₂ N ₈ O ₃ S
Molecular Weight:	466.52
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	Anti-inflammatory agent 49 is a potent inhibitor of Drp1-Fis1 interaction, inhibits GTPase, and can be used in the study of diseases caused by mitochondrial dysfunction.
Targets(IC50)	Others,Dynamin,GTPase
In vitro	In H9c2 cells, the anti-inflammatory agent 49 (2 μM; 16 hours) reduced the percentage of cells with fragmented mitochondria. The percentage of fragmented cells decreased from 22% (LPS + Veh) to 9% (LPS + SC9), compared to 4% in the absence of LPS[1].
In vivo	The anti-inflammatory agent 49 (10 mg/kg, every 8 hours for 72 hours) effectively treats endotoxemia induced by LPS in mice [1].

Solubility Information

Solubility	DMSO: 80 mg/mL (171.48 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: 3.3 mg/mL (7.07 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	2.1435 mL	10.7177 mL	21.4353 mL
5 mM	0.4287 mL	2.1435 mL	4.2871 mL
10 mM	0.2144 mL	1.0718 mL	2.1435 mL
50 mM	0.0429 mL	0.2144 mL	0.4287 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

Luis Rios, et al. Targeting an allosteric site in dynamin-related protein 1 to inhibit Fis1-mediated mitochondrial dysfunction. Nat Commun. 2023 Jul 19;14(1):4356.

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