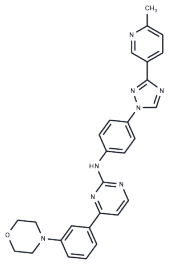
Data Sheet (Cat.No.T16927)

TargetMol

SR-3306

Chemical Properties



CAS No. : 1128096-91-2

Formula: C28H26N8O

Molecular Weight: 490.56

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	SR-3306 is a brain-penetrant and selective pan-JNK (JNK1/2/3) inhibitor with IC50 values of 67 nM, 283 nM, 159 nM, respectively, and reduces food intake and body weight.
Targets(IC50)	JNK
In vitro	**METHODS**: SR-3306 (0.001-100 μM) was used to treat cisplatin-resistant ovarian cancer cells to study its anticancer activity. **RESULTS** SR-3306 had inhibitory activity against cisplatin-resistant ovarian cancer cells, with an IC50 value of 0.05 μM. [4]
In vivo	**METHODS**: Dopaminergic neurons were labeled with antibodies against tyrosine hydroxylase (TH) in brain sections from rats treated with 6-OHDA. Rats received SR-3306 (2.5 mg/kg, 10 mg/kg, subcutaneously, for 14 days). The ability of SR-3306 to prevent nigrostriatal neuronal loss was examined in the 6-OHDA model. **RESULTS** 6-OHDA-lesioned rats treated with 2.5 mg/kg SR-3306 showed a slight increase in ipsilateral TH-positive neurons, and 10 mg/kg SR-3306 had a significant protective effect against 6-OHDA-induced neurodegeneration when the contralateral side was compared with the ipsilateral side. [1] **METHODS**: Wild-type lean mice were given SR3306 (30, 60 mg/kg, intraperitoneal injection) to study the effects of SR3306 on food intake and energy balance. **RESULTS** 30 mg/kg of SR3306 did not affect saccharin intake preference, while a dose of 60 mg/kg produced a strong avoidance response to saccharin. [2]

Solubility Information

Solubility	DMSO: 125 mg/mL (254.81 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 (8.15 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	2.0385 mL	10.1924 mL	20.3849 mL
5 mM	0.4077 mL	2.0385 mL	4.077 mL
10 mM	0.2038 mL	1.0192 mL	2.0385 mL
50 mM	0.0408 mL	0.2038 mL	0.4077 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

Crocker CE, et al. JNK Inhibition Protects Dopamine Neurons and Provides Behavioral Improvement in a Rat 6-hydroxydopamine Model of Parkinson's Disease. ACS Chem Neurosci. 2011 Apr 20;2(4):207-212.
Gao S, et al. Pharmacological Inhibition of c-Jun N-terminal Kinase Reduces Food Intake and Sensitizes Leptin's Anorectic Signaling Actions. Sci Rep. 2017 Feb 6;7:41795.
Sima N, et al. Small Molecules Identified from a Quantitative Drug Combinational Screen Resensitize Cisplatin's Response in Drug-Resistant Ovarian Cancer Cells. Transl Oncol. 2018 Aug;11(4):1053-1064.
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