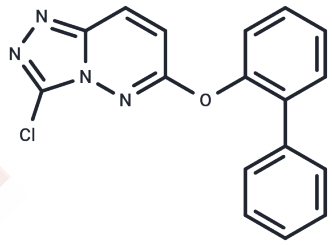
Data Sheet (Cat.No.T73443)

TargetMol

STL1267

Chemical Properties



CAS No. : 1429024-58-7

Formula: C17H11ClN4O

Molecular Weight: 322.75

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	STL1267 is a REV-ERB agonist that can cross the blood-brain barrier and inhibits BMAL1 gene expression. It can be used to study chronic diseases and inflammatory pain.
Targets(IC50)	REV-ERB
In vitro	STL1267 is an agonist of REV-ERB with a Ki value of 0.16 μM for Rev-erbα. The EC50 collected by STL1267 for NCoR ID1 is 0.13μM. [1]
In vivo	Intraperitoneal injection of STL1267 (50 mg/kg) into C57Bl / 6 J mice showed that STL1267 successfully crossed the blood-brain barrier with a plasma half-life of ~1.6 hours. [1]

Solubility Information

Solubility	DMSO: 35 mg/mL (108.44 mM),Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)
In vivo Formulation	10% DMSO+90% Saline: < 3.5 mg/mL (10.84 mM),Lower concentrations may be soluble, but exact solubility limit is unknown. 10% DMSO+40% PEG300+5% Tween 80+45% Saline: 3.5 mg/mL (10.84 mM),Solution. *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	3.0984 mL	15.4919 mL	30.9837 mL
5 mM	0.6197 mL	3.0984 mL	6.1967 mL
10 mM	0.3098 mL	1.5492 mL	3.0984 mL
50 mM	0.062 mL	0.3098 mL	0.6197 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

Murray MH, et al. Structural basis of synthetic agonist activation of the nuclear receptor REV-ERB. Nat Commun. 2022 Nov 21;13(1):7131.