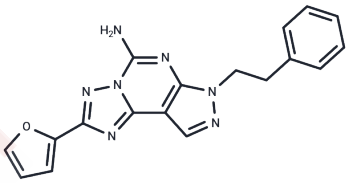
Data Sheet (Cat.No.T6979)

TargetMol

SCH 58261

Chemical Properties



CAS No. : 160098-96-4

Formula: C18H15N7O

Molecular Weight: 345.36

Storage: Store at low temperature,Keep away from moisture
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	SCH 58261 is a potent and selective A2a adenosine receptor antagonist.The Ki =2.3 nM for rat A2a and 2 nM is for bovine A2a.
Targets(IC50)	Adenosine Receptor
In vitro	SCH 58261 causes the inhibition of rabbit platelet aggregation and porcine coronary artery relaxation by antagonizing competitively the effects induced by CGS 21680. [1]
In vivo	In mice with Spinal cord injury, SCH58261 (0.01 mg/kg, i.p.) reduces demyelination and levels of TNF-α, Fas-L, PAR, Bax expression and activation of JNK MAPK. Chronic SCH58261 administration improves the neurological deficit up. [2] In rats with 6-OHDA-induced Parkinson's disease, SCH58261 (2 mg/kg, i.p.) improves the 6-OHDA-induced bradykinesia and motor disturbance. [3]

Solubility Information

Solubility	DMSO: 35.71 mg/mL (103.4 mM),Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)
In vivo Formulation	10% DMSO+90% Saline: < 3.57 mg/mL (10.34 mM),Lower concentrations may be soluble, but exact solubility limit is unknown. 10% DMSO+40% PEG300+5% Tween 80+45% Saline: 3.57 mg/mL (10.34 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	2.8955 mL	14.4776 mL	28.9553 mL
5 mM	0.5791 mL	2.8955 mL	5.7911 mL
10 mM	0.2896 mL	1.4478 mL	2.8955 mL
50 mM	0.0579 mL	0.2896 mL	0.5791 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

Zocchi C, et al. J Pharmacol Exp Ther. 1996, 276(2), 398-404.
Chen J, Li T, Huang D, et al.Integrating UHPLC-MS/MS quantitative analysis and exogenous purine supplementation to elucidate the antidepressant mechanism of Chaigui granules by regulating purine metabolism.Journal of Pharmaceutical Analysis.2023
Paterniti I, et al. J Neuroinflammation. 2011, 8, 31.
Reyhani-Rad S, et al. Acta Cir Bras. 2016, 31(2), 133-137.