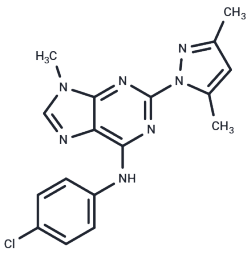
Data Sheet (Cat.No.T16345)

TargetMol

NS13001

Chemical Properties



CAS No. :	1063331-94-1
Formula:	C17H16ClN7
Molecular Weight:	353.81
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	NS13001 (N-(4-Chlorophenyl)-2-(3,5-dimethyl-1H-pyrazol-1-yl)-9-methyl-9H-purin-6-amine) is a potent, selective, orally active allosteric positive modulator of SK channels (small conductance calcium-activated potassium channels). The EC50s are 1.8 and 0.14 μM for SK2 and SK3, respectively. NS13001 holds promise as a potential therapeutic agent for treatment of spinocerebellar ataxia type 2 (SCA2) and possibly other cerebellar ataxias.
Targets(IC50)	Potassium Channel

Solubility Information

Solubility	DMSO: 90 mg/mL (254.37 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: 1 mg/mL (2.83 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	2.8264 mL	14.1319 mL	28.2638 mL
5 mM	0.5653 mL	2.8264 mL	5.6528 mL
10 mM	0.2826 mL	1.4132 mL	2.8264 mL
50 mM	0.0565 mL	0.2826 mL	0.5653 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

Kasumu AW, et al. Selective positive modulator of calcium-activated potassium channels exerts beneficial effects in a mouse model of spinocerebellar ataxia type 2. Chem Biol. 2012 Oct 26;19(10):1340-53.