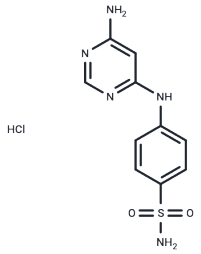
Data Sheet (Cat.No.T8230)

TargetMol

PNU112455A hydrochloride

Chemical Properties



CAS No. : 21886-12-4

Formula: C10H12ClN5O2S

Molecular Weight: 301.75

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	PNU112455A hydrochloride is an ATP site competetive inhibitor of CDK2 and CDK5,binds to the ATP site of CDK2 and CDK5 with Kms of 3.6 and 3.2 μM, respectively.
Targets(IC50)	CDK

Solubility Information

Solubility	DMSO: 125 mg/mL (414.25 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 (13.26 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	3.314 mL	16.570 mL	33.140 mL
5 mM	0.6628 mL	3.314 mL	6.628 mL
10 mM	0.3314 mL	1.657 mL	3.314 mL
50 mM	0.0663 mL	0.3314 mL	0.6628 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

Clare PM, et al. The cyclin-dependent kinases cdk2 and cdk5 act by a random, anticooperative kinetic mechanism. J Biol Chem. 2001 Dec 21;276(51):48292-9.

Jiang L, Yu Y, Li Z, et al.BMS-265246, a Cyclin-Dependent Kinase Inhibitor, Inhibits the Infection of Herpes Simplex Virus Type 1.Viruses.2023, 15(8): 1642.

Iii E A M , Beaman-Hall C M , Mathur A , et al. Roscovitine, olomoucine, purvalanol: inducers of apoptosis in maturing cerebellar granule neurons[J]. Biochemical Pharmacology, 2004, 67(10):1947-1964.