

AZ-Dyrk1B-33

Chemical Properties

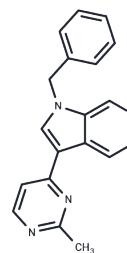
CAS No. : 1679330-37-0

Formula: C₁₉H₁₆N₄

Molecular Weight: 300.36

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	AZ-Dyrk1B-33 (3-(2-Methyl-4-pyrimidinyl)-1-(phenylmethyl)-1H-pyrrolo[2,3-c]pyridine) is a potent and selective Dyrk1B kinase inhibitor with an IC ₅₀ of 7 nM.
Targets(IC ₅₀)	DYRK
In vitro	Administration of AZ-Dyrk1B-33 shows inhibition of phosphorylation of Dyrk pS421 in cells with an IC ₅₀ of 0.192 μM and no effect in sensitization[1].

Solubility Information

Solubility	DMSO: 120 mg/mL (399.52 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 (13.32 mM),Sonication is recommended. <i>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.</i>

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	3.3293 mL	16.6467 mL	33.2934 mL
5 mM	0.6659 mL	3.3293 mL	6.6587 mL
10 mM	0.3329 mL	1.6647 mL	3.3293 mL
50 mM	0.0666 mL	0.3329 mL	0.6659 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

Kettle JG, et al. Discovery and optimization of a novel series of Dyrk1B kinase inhibitors to explore a MEK resistance hypothesis. *J Med Chem.* 2015 Mar 26;58(6):2834-44.

Inhibitor · Natural Compounds · Compound Libraries · Recombinant Proteins

This product is for Research Use Only · Not for Human or Veterinary or Therapeutic Use

Tel:781-999-4286 E_mail:info@targetmol.com Address:34 Washington Street,Wellesley Hills,MA 02481