

## PI4KIII beta inhibitor 3

## Chemical Properties

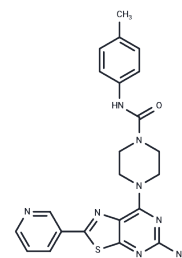
CAS No. : 1245319-54-3

Formula: C<sub>22</sub>H<sub>22</sub>N<sub>8</sub>O<sub>5</sub>

Molecular Weight: 446.53

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	PI4KIII beta inhibitor 3 is a novel, highly effective inhibitor of PI4KIII $\beta$ with an IC <sub>50</sub> of 5.7 nM.
Targets(IC <sub>50</sub> )	PI3K,PI4K
In vitro	PI4KIII beta inhibitor 3 is a potent PI4KIII inhibitor with an IC <sub>50</sub> of 5.7 nM. It exhibits significant immunosuppressive activity in the mixed lymphocyte reaction (MLR) assay with an IC <sub>50</sub> of 3 nM and inhibits IL2 and IFN $\gamma$ secretion with IC <sub>50</sub> values of less than 1 nM, demonstrating effectiveness comparable to cyclosporine A, whose IC <sub>50</sub> values for IFN $\gamma$ and IL2 release are 2 nM and less than 1 nM, respectively [1].
In vivo	Oral administration of PI4KIII beta inhibitor 3 results in prolonged graft survival in 3 out of 6 grafts in each group at day 30. Several grafts continued beating after withdrawal of the treatment (up to 60 days), indicating the induction of a certain type of graft tolerance. To evaluate the operational tolerance phenotype, animals with functional graft at day 60 are challenged with a second graft from the same donor strain or from a third party.

## Solubility Information

Solubility	DMSO: 20 mg/mL (44.79 mM),Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)
------------	-------------------------------------------------------------------------------------------------------------------------

### Preparing Stock Solutions

---

	<b>1mg</b>	<b>5mg</b>	<b>10mg</b>
1 mM	2.2395 mL	11.1975 mL	22.3949 mL
5 mM	0.4479 mL	2.2395 mL	4.479 mL
10 mM	0.2239 mL	1.1197 mL	2.2395 mL
50 mM	0.0448 mL	0.2239 mL	0.4479 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

Jean Herman, et al. Autoimmune and inflammatory disorder therapy. From PCT Int. Appl. (2013), WO 2013034738 A1

**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