

TPN171

Chemical Properties

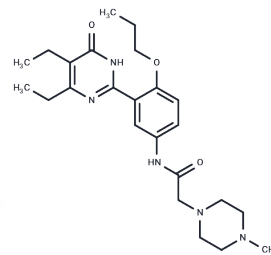
CAS No. : 1229018-87-4

Formula: C₂₄H₃₅N₅O₃

Molecular Weight: 441.57

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	TPN171 is potent PDE5 inhibitor with subnanomolar potency for PDE5 and good selectivity over PDE6, which has the potential for the treatment of pulmonary arterial hypertension (PAH). TPN171 was proven to exert a longer lasting effect than sildenafil in animal models, providing a foundation for a once-daily oral administration for its clinical use.
Targets(IC50)	PDE

Solubility Information

Solubility	DMSO: 50 mg/mL (113.23 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 (2.26 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>

A DRUG SCREENING EXPERT

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	2.2646 mL	11.3232 mL	22.6465 mL
5 mM	0.4529 mL	2.2646 mL	4.5293 mL
10 mM	0.2265 mL	1.1323 mL	2.2646 mL
50 mM	0.0453 mL	0.2265 mL	0.4529 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

Wang Z, et al. Pharmacokinetics-Driven Optimization of 4(3 H)-Pyrimidinones as Phosphodiesterase Type 5 Inhibitors Leading to TPN171, a Clinical Candidate for the Treatment of Pulmonary Arterial Hypertension. J Med Chem. 2019 May 23;62(10):4979-4990.

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