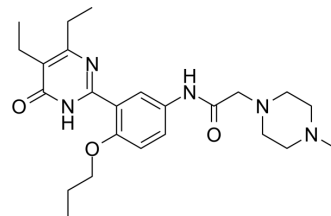


TPN171

Cat. No.:	HY-128593		
CAS No.:	1229018-87-4		
Molecular Formula:	C ₂₄ H ₃₅ N ₅ O ₃		
Molecular Weight:	441.57		
Target:	Phosphodiesterase (PDE)		
Pathway:	Metabolic Enzyme/Protease		
Storage:	Powder	-20°C	3 years
		4°C	2 years
	In solvent	-80°C	6 months
		-20°C	1 month



SOLVENT & SOLUBILITY

In Vitro	DMSO : 25 mg/mL (56.62 mM; ultrasonic and warming and heat to 60°C)				
		Solvent Concentration	Mass 1 mg	5 mg	10 mg
	Preparing Stock Solutions	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	
Please refer to the solubility information to select the appropriate solvent.					
In Vivo	1. Add each solvent one by one: 10% DMSO >> 40% PEG300 >> 5% Tween-80 >> 45% saline Solubility: ≥ 1 mg/mL (2.26 mM); Clear solution				
	2. Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline) Solubility: ≥ 1 mg/mL (2.26 mM); Clear solution				
	3. Add each solvent one by one: 10% DMSO >> 90% corn oil Solubility: ≥ 1 mg/mL (2.26 mM); Clear solution				

BIOLOGICAL ACTIVITY

Description	TPN171 is a potent, selective and oral bioavailable inhibitor of phosphodiesterase type 5 (PDE5) with an IC ₅₀ of 0.62 nM, being developed for the treatment of pulmonary arterial hypertension (PAH) ^[1] .
IC ₅₀ & Target	PDE5 0.62 nM (IC ₅₀)

REFERENCES

[1]. 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.

Caution: Product has not been fully validated for medical applications. For research use only.

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