R-IMPP

Cat. No.:	HY-101354				
CAS No.:	2133832-83-2				
Molecular Formula:	C ₂₄ H ₂₇ N ₃ O ₂				
Molecular Weight:	389.49				
Target:	Ser/Thr Protease				
Pathway:	Metabolic Enzyme/Protease				
Storage:	Powder	-20°C	3 years		
		4°C	2 years		
	In solvent	-80°C	2 years		
		-20°C	1 year		

SOLVENT & SOLUBILITY

In Vitro	DMSO : 100 mg/mL (2	DMSO : 100 mg/mL (256.75 mM; Need ultrasonic)					
	Preparing Stock Solutions	Solvent Mass Concentration	1 mg	5 mg	10 mg		
		1 mM	2.5675 mL	12.8373 mL	25.6746 mL		
		5 mM	0.5135 mL	2.5675 mL	5.1349 mL		
		10 mM	0.2567 mL	1.2837 mL	2.5675 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: ≥ 2.5 mg/mL (6.42 mM); Clear solution						
	2. Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline) Solubility: 2.5 mg/mL (6.42 mM); Suspended solution; Need ultrasonic						
	3. Add each solvent one by one: 10% DMSO >> 90% corn oil Solubility: ≥ 2.5 mg/mL (6.42 mM); Clear solution						

BIOLOGICAL ACTIVITY					
Description	R-IMPP (PF-00932239) is an anti-secretagogue of PCSK9 (IC ₅₀ =4.8 μM), which targets the 80S ribosome to inhibit PCSK9 protein translation ^[1] .				
IC ₅₀ & Target	IC50: 4.8 μM (PCSK9) ^[1]				
In Vitro	R-IMPP stimulates uptake of LDL-C in hepatoma cells by increasing LDL-R levels, without altering levels of secreted transferrin. R-IMPP does not decrease PCSK9 transcription or increase PCSK9 degradation, but causes transcript-dependent				

Product Data Sheet





inhibition of PCSK9 translation. R-IMPP is able to selectively bind to human, but not E. coli, ribosomes^[1].

MCE has not independently confirmed the accuracy of these methods. They are for reference only.

REFERENCES

[1]. Petersen DN, et al. A Small-Molecule Anti-secretagogue of PCSK9 Targets the 80S Ribosome to Inhibit PCSK9 Protein Translation. Cell Chem Biol. 2016 Nov 17;23(11):1362-1371

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

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