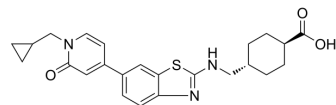


PI4K-IN-1

Cat. No.:	HY-106012
CAS No.:	1800017-49-5
Molecular Formula:	C ₂₄ H ₂₇ N ₃ O ₃ S
Molecular Weight:	437.55
Target:	PI4K; PI3K
Pathway:	PI3K/Akt/mTOR
Storage:	Please store the product under the recommended conditions in the Certificate of Analysis.



SOLVENT & SOLUBILITY

In Vitro	DMSO : 125 mg/mL (285.68 mM; Need ultrasonic)				
		Solvent Concentration	Mass		
	Preparing Stock Solutions	1 mM	1 mg	5 mg	10 mg
		5 mM	2.2855 mL	11.4273 mL	22.8545 mL
		10 mM	0.4571 mL	2.2855 mL	4.5709 mL
	10 mM	0.2285 mL	1.1427 mL	2.2855 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: ≥ 2.08 mg/mL (4.75 mM); Clear solution				
	2. Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline) Solubility: ≥ 2.08 mg/mL (4.75 mM); Clear solution				
	3. Add each solvent one by one: 10% DMSO >> 90% corn oil Solubility: ≥ 2.08 mg/mL (4.75 mM); Clear solution				

BIOLOGICAL ACTIVITY

Description	PI4K-IN-1 (compound 44) is a potent PI4KIII inhibitor, with pIC ₅₀ values of 9.0 and 6.6 for PI4KIIIα and PI4KIIIβ, respectively. PI4K-IN-1 also inhibits PI3Kα/β/γ/δ, with pIC ₅₀ values of 4.0/<3.7/5.0/<4.1, respectively ^[1] .			
IC ₅₀ & Target	PI4KIIIα 9.0 (pIC ₅₀)	PI4KIIIβ 6.6 (pIC ₅₀)	PI3Kα 4.0 (pIC ₅₀)	PI3Kβ <3.7 (pIC ₅₀)
	PI3Kγ 5.0 (pIC ₅₀)	PI3Kδ <4.1 (pIC ₅₀)		

REFERENCES

[1]. Raubo P, et al. Discovery of potent, selective small molecule inhibitors of α -subtype of type III phosphatidylinositol-4-kinase (PI4KIII α). Bioorg Med Chem Lett. 2015 Aug 15;25(16):3189-93.

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

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