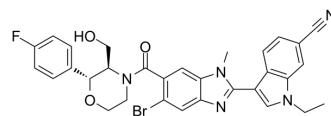


PDE12-IN-1

Cat. No.:	HY-117318
CAS No.:	2259620-80-7
Molecular Formula:	C ₃₁ H ₂₇ BrFN ₅ O ₃
Molecular Weight:	616.48
Target:	Phosphodiesterase (PDE)
Pathway:	Metabolic Enzyme/Protease
Storage:	4°C, sealed storage, away from moisture and light * In solvent : -80°C, 6 months; -20°C, 1 month (sealed storage, away from moisture and light)



SOLVENT & SOLUBILITY

In Vitro	DMSO : 90 mg/mL (145.99 mM; Need ultrasonic)					
	Preparing Stock Solutions	Solvent	Mass	1 mg	5 mg	10 mg
		Concentration				
		1 mM		1.6221 mL	8.1106 mL	16.2211 mL
		5 mM		0.3244 mL	1.6221 mL	3.2442 mL
	10 mM		0.1622 mL	0.8111 mL	1.6221 mL	
Please refer to the solubility information to select the appropriate solvent.						
In Vivo	<ol style="list-style-type: none"> Add each solvent one by one: 10% DMSO >> 90% corn oil Solubility: ≥ 4.75 mg/mL (7.71 mM); Clear solution Add each solvent one by one: 10% DMSO >> 40% PEG300 >> 5% Tween-80 >> 45% saline Solubility: ≥ 4.5 mg/mL (7.30 mM); Clear solution Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline) Solubility: 4.5 mg/mL (7.30 mM); Suspended solution; Need ultrasonic 					

BIOLOGICAL ACTIVITY

Description	PDE12-IN-1 is a potent and selective PDE12 inhibitor with a pIC ₅₀ value for enzyme inhibition of 9.1. PDE12-IN-1 increases 2',5'-linked adenylyate polymers (2-5A) levels, and the pEC ₅₀ value is 7.7. PDE12-IN-1 shows antiviral activity ^[1] .
IC₅₀ & Target	PDE12 9.1 (pIC ₅₀)
In Vitro	PDE12-IN-1 inhibits the EMCV-induced cytopathic effect in HeLa Ohio cells with a pIC ₅₀ of 6.7. PDE12-IN-1 inhibits HeLa Ohio cell proliferation in the absence of EMCV infection with a pIC ₅₀ of 5.7. PDE12-IN-1 inhibits the proliferation of both HeLa and

HeLa Δ PDE12 cells with a pIC₅₀ of 5.7. PDE12-IN-1 inhibits HRV infection with a pIC₅₀ of 6.9^[1].
MCE has not independently confirmed the accuracy of these methods. They are for reference only.

REFERENCES

[1]. Wood ER, et al. The Role of Phosphodiesterase 12 (PDE12) as a Negative Regulator of the Innate Immune Response and the Discovery of Antiviral Inhibitors. J Biol Chem. 2015 Aug 7;290(32):19681-96.

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

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