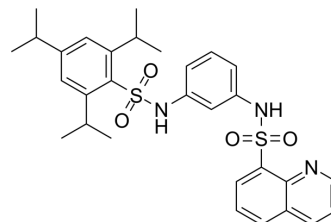


PDE4B-IN-3

Cat. No.:	HY-147830		
CAS No.:	2819779-01-4		
Molecular Formula:	C ₃₀ H ₃₅ N ₃ O ₄ S ₂		
Molecular Weight:	565.75		
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 : 50 mg/mL (88.38 mM; Need ultrasonic)				
	Solvent Concentration	Mass	1 mg	5 mg	10 mg
Preparing Stock Solutions	1 mM		1.7676 mL	8.8378 mL	17.6757 mL
	5 mM		0.3535 mL	1.7676 mL	3.5351 mL
	10 mM		0.1768 mL	0.8838 mL	1.7676 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 (4.42 mM); Clear solution 2. Add each solvent one by one: 10% DMSO >> 90% corn oil Solubility: 2.5 mg/mL (4.42 mM); Suspended solution; Need ultrasonic				

BIOLOGICAL ACTIVITY

Description	PDE4B-IN-3 is a potent PDE4B inhibitor with an IC ₅₀ of 0.94 μM. PDE4B-IN-3 has anti-inflammatory activities ^[1] .
IC₅₀ & Target	PDE4B .94 μM (IC ₅₀)
In Vitro	PDE4B-IN-3 (compound f4) has good inhibitory activity on the production of NO, TNF-α and IL-1β with IC ₅₀ values of 20.40 μM, 23.48 μM, and 18.98 μM in RAW264.7 cells. PDE4B-IN-3 could also inhibit the expression of iNOS and COX-2 in RAW264.7 cells ^[1] . MCE has not independently confirmed the accuracy of these methods. They are for reference only.

In Vivo

In vivo studies shows that PDE4B-IN-3 (compound f4; 10-30 mg/kg) could improve the degree of foot swelling and knee joint pathology in adjuvant-induced arthritic rats and decrease the levels of serum inflammatory factors TNF- α and IL-1 β in a dose-dependent manner^[1].

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

REFERENCES

[1]. Siqi Xing, et al. Novel quinoline-based derivatives: A new class of PDE4B inhibitors for adjuvant-induced arthritis. Eur J Med Chem. 2022 Aug 5;238:114497.

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

Tel: 609-228-6898

Fax: 609-228-5909

E-mail: tech@MedChemExpress.com

Address: 1 Deer Park Dr, Suite Q, Monmouth Junction, NJ 08852, USA