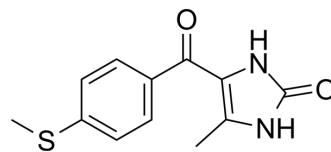


Enoximone

Cat. No.:	HY-B1639		
CAS No.:	77671-31-9		
Molecular Formula:	C ₁₂ H ₁₂ N ₂ O ₂ S		
Molecular Weight:	248.3		
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 : 8.33 mg/mL (33.55 mM; Need ultrasonic)

Concentration	Solvent	Mass		
		1 mg	5 mg	10 mg
Preparing Stock Solutions	1 mM	4.0274 mL	20.1369 mL	40.2739 mL
	5 mM	0.8055 mL	4.0274 mL	8.0548 mL
	10 mM	0.4027 mL	2.0137 mL	4.0274 mL

Please refer to the solubility information to select the appropriate solvent.

BIOLOGICAL ACTIVITY

Description

Enoximone is an inotropic vasodilating agent and a selective and orally active phosphodiesterase III (PDE3) inhibitor with an IC₅₀ of 5.9 μM. Enoximone induces vasodilatation and increases intracellular levels of cAMP by inhibiting cGMP-inhibited PDE. Enoximone also exhibits PDE4 inhibitory effect with an IC₅₀ of 21.1 μM for myocardial PDE4A. Enoximone has the potential for congestive heart failure research and has bronchodilatory, antiasthma and anti-inflammatory effects^{[1][2][3]}.

IC₅₀ & Target

PDE3/PDE 5.9 μM (IC ₅₀)	PDE4A 21.1 μM (IC ₅₀ , myocardial PDE4A)
--	--

In Vitro

In vitro, 10 μM Enoximone-treated bronchoalveolar lavage (BAL) eosinophils induced by IL-33 treatment shows significantly lower CD11b expression when compared with diluent-treated BAL eosinophils^[1].

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

In Vivo

Topical Enoximone (25 μg; intratracheal route) abrogates house dust mite (HDM)-induced allergic airway inflammation^[1]. The Enoximone-treated (25 μg; for 5 days) HDM-exposed mice shows significant reductions in inflammatory cell numbers including eosinophils, macrophages, neutrophils, ILC2s, and T cells, indicating that Enoximone treatment reduces airway

inflammation^[1].

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

REFERENCES

- [1]. Jan Beute, et al. A Pathophysiological Role of PDE3 in Allergic Airway Inflammation. JCI Insight. 2018 Jan 25;3(2):e94888.
- [2]. R C Dage, et al. Pharmacology and Pharmacokinetics of Enoximone. Cardiology. 1990;77 Suppl 3:2-13; discussion 27-33.
- [3]. M B Vroom, et al. Effect of Phosphodiesterase Inhibitors on Human Arteries in Vitro. Br J Anaesth. 1996 Jan;76(1):122-9.
-

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