Mometasone

Cat. No.:	HY-B0629
CAS No.:	105102-22-5
Molecular Formula:	C ₂₂ H ₂₈ Cl ₂ O ₄
Molecular Weight:	427.36
Target:	Glucocorticoid Receptor
Pathway:	Immunology/Inflammation; Vitamin D Related/Nuclear Receptor
Storage:	4°C, protect from light
	* In solvent : -80°C, 6 months; -20°C, 1 month (protect from light)

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SOLVENT & SOLUBILITY

In Vitro	DMSO : 125 mg/mL (292.49 mM; Need ultrasonic)							
	Preparing Stock Solutions	Solvent Mass Concentration	1 mg	5 mg	10 mg			
		1 mM	2.3399 mL	11.6997 mL	23.3995 mL			
		5 mM	0.4680 mL	2.3399 mL	4.6799 mL			
		10 mM	0.2340 mL	1.1700 mL	2.3399 mL			
	Please refer to the so	lubility information to select the app	propriate solvent.	1				
In Vivo	1. Add each solvent one by one: 10% DMSO >> 40% PEG300 >> 5% Tween-80 >> 45% saline Solubility: ≥ 2.08 mg/mL (4.87 mM); Clear solution							
		2. Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline) Solubility: ≥ 2.08 mg/mL (4.87 mM); Clear solution						
	3. Add each solvent one by one: 10% DMSO >> 90% corn oil Solubility: ≥ 2.08 mg/mL (4.87 mM); Clear solution							

BIOLOGICAL ACTIVITY				
Description	Mometasone is an inhaled glucocorticoid. Mometasone can be used in mild asthma with a low sputum eosinophil level. Mometasone has the potential for the research of chronic hand eczema and rhinosinusitis ^{[1][2]} .			
In Vivo	Mometasone (0.1-3 mg/kg; intranasally) inhibits the increased airway sensitivity to aerosolized methacholine at the highest dose tested of 3 mg/kg, and dose-dependently inhibits the allergen-induced increase in Penh in a mouse model of allergic lung inflammation ^[3] . MCE has not independently confirmed the accuracy of these methods. They are for reference only.			

Product Data Sheet

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CI

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REFERENCES

[1]. Veien NK, et al. Long-term, intermittent treatment of chronic hand eczema with mometasone furoate. Br J Dermatol. 1999 May;140(5):882-6.

[2]. Lazarus SC, et al. Mometasone or Tiotropium in Mild Asthma with a Low Sputum Eosinophil Level. N Engl J Med. 2019 May 23;380(21):2009-2019.

[3]. Wyss D, et al. Synergistic effect of formoterol and mometasone in a mouse model of allergic lung inflammation. Br J Pharmacol. 2007 Sep;152(1):83-90.

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

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