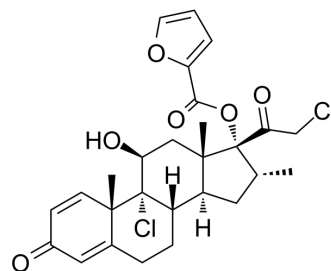


Mometasone furoate

Cat. No.:	HY-13693												
CAS No.:	83919-23-7												
Molecular Formula:	C ₂₇ H ₃₀ Cl ₂ O ₆												
Molecular Weight:	521.43												
Target:	Glucocorticoid Receptor												
Pathway:	Immunology/Inflammation; Vitamin D Related/Nuclear Receptor												
Storage:	<table border="0"> <tr> <td>Powder</td> <td>-20°C</td> <td>3 years</td> </tr> <tr> <td></td> <td>4°C</td> <td>2 years</td> </tr> <tr> <td>In solvent</td> <td>-80°C</td> <td>2 years</td> </tr> <tr> <td></td> <td>-20°C</td> <td>1 year</td> </tr> </table>	Powder	-20°C	3 years		4°C	2 years	In solvent	-80°C	2 years		-20°C	1 year
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SOLVENT & SOLUBILITY

In Vitro	DMSO : 50 mg/mL (95.89 mM; Need ultrasonic)																					
	<table border="1"> <thead> <tr> <th rowspan="2">Solvent</th> <th rowspan="2">Mass</th> <th colspan="3">Concentration</th> </tr> <tr> <th>1 mg</th> <th>5 mg</th> <th>10 mg</th> </tr> </thead> <tbody> <tr> <td rowspan="3">Preparing Stock Solutions</td> <td>1 mM</td> <td>1.9178 mL</td> <td>9.5890 mL</td> <td>19.1780 mL</td> </tr> <tr> <td>5 mM</td> <td>0.3836 mL</td> <td>1.9178 mL</td> <td>3.8356 mL</td> </tr> <tr> <td>10 mM</td> <td>0.1918 mL</td> <td>0.9589 mL</td> <td>1.9178 mL</td> </tr> </tbody> </table>	Solvent	Mass	Concentration			1 mg	5 mg	10 mg	Preparing Stock Solutions	1 mM	1.9178 mL	9.5890 mL	19.1780 mL	5 mM	0.3836 mL	1.9178 mL	3.8356 mL	10 mM	0.1918 mL	0.9589 mL	1.9178 mL
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	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% (20% SBE-β-CD in saline) Solubility: ≥ 2.5 mg/mL (4.79 mM); Clear solution Add each solvent one by one: 10% DMSO >> 90% corn oil Solubility: ≥ 2.5 mg/mL (4.79 mM); Clear solution 																					

BIOLOGICAL ACTIVITY

Description	Mometasone furoate (Sch32088) is a glucocorticoid receptor agonist with anti-inflammatory and anti-allergic activity. Mometasone furoate acts as a corticosteroid agent and used for topical applications in chronic skin eczema and airway inflammation management of asthma in vivo ^[1]
IC₅₀ & Target	IC ₅₀ : Glucocorticoid Receptor
In Vitro	Mometasone furoate binds to a glucocorticoid receptor causes conformational changes in the receptor, separation from chaperones, and the receptor moves to the nucleus ^[1] . ?Mometasone furoate (0.1-10 μM; 2h before LPS stimulation) strongly inhibits LPS-stimulated nitrite production in a concentration-dependent manner in J774 macrophages, The IC ₅₀ value is 0.00024 μM for Mometasone?furoate in J774 cells

[1].

Mometasone furoate (0.1-10 μ M; 2h before LPS stimulation) is more potent than DEX, it significantly inhibits iNOS expression at a 0.01 μ M concentration whereas Dex became active at 0.1 μ M. Additionally, the inhibition of cox-2 protein expression at 0.01 μ M is 79% for Mometasone furoate and 39% for Dex^[1].

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

CUSTOMER VALIDATION

- J Am Chem Soc. 2021 Oct 14.
- Hematology. 2018 Sep;23(8):478-485.

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REFERENCES

[1]. Maria Galuppo, et al. Use of Mometasone furoate in prolonged treatment of experimental spinal cord injury in mice: A comparative study of three different glucocorticoids. Pharmacol Res. 2015 Sep;99:316-28

[2]. <https://go.drugbank.com/drugs/DB14512>

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

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