

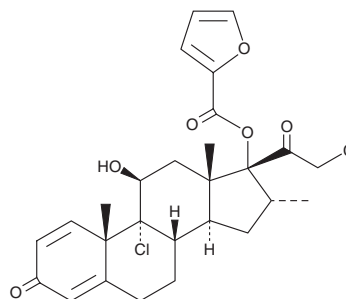
PRODUCT INFORMATION



Mometasone Furoate

Item No. 21365

CAS Registry No.: 83919-23-7
Formal Name: 9,21-dichloro-17-[(2-furanylcarbonyl)oxy]-11 β -hydroxy-16 α -methyl-pregna-1,4-diene-3,20-dione
Synonym: SCH 32088
MF: C₂₇H₃₀Cl₂O₆
FW: 521.4
Purity: \geq 98%
UV/Vis.: λ_{max} : 248 nm
Supplied as: A crystalline solid
Storage: -20°C
Stability: \geq 4 years



Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

Laboratory Procedures

Mometasone furoate is supplied as a crystalline solid. A stock solution may be made by dissolving the mometasone furoate in the solvent of choice, which should be purged with an inert gas. Mometasone furoate is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide (DMF). The solubility of mometasone furoate in ethanol is approximately 1.67 mg/ml and approximately 30 mg/ml in DMSO and DMF.

Mometasone furoate is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, mometasone furoate should first be dissolved in DMSO and then diluted with the aqueous buffer of choice. Mometasone furoate has a solubility of approximately 0.33 mg/ml in a 1:2 solution of DMSO:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

Description

Mometasone furoate is a prodrug form of the synthetic glucocorticoid mometasone (Item No. 31702).¹ Intranasal administration of mometasone furoate (1 μ g/nostril) reduces the frequency of sneezing and nasal rubbing in a rat model of histamine-induced allergic rhinitis.² Topical application of mometasone furoate reduces croton oil-induced ear edema in mice (ED₅₀ = 0.31 μ g/ml).³ Formulations containing mometasone furoate have been used in the treatment of allergic rhinitis, atopic dermatitis, and asthma.

References

1. Lin, R., Elf, S., Shan, C., *et al.* 6-Phosphogluconate dehydrogenase links oxidative PPP, lipogenesis and tumour growth by inhibiting LKB1-AMPK signalling. *Nat. Cell Biol.* **17(11)**, 1484-1496 (2015).
2. Altuntaş, E.E., Doğan, O.T., Saraç, B., *et al.* The effects of mometasone furoate and strontium chloride in a rat model of allergic rhinitis. *Ear Nose Throat J.* **97(1-2)**, E1-E7 (2018).
3. Ogawa, M. Dissociation of local anti-inflammatory effect and systemic effects of mometasone furoate in mice. *Immunopharmacol. Immunotoxicol.* **31(4)**, 601-606 (2009).

WARNING

THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

SAFETY DATA

This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the complete Safety Data Sheet, which has been sent via email to your institution.

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CAYMAN CHEMICAL

1180 EAST ELLSWORTH RD

ANN ARBOR, MI 48108 · USA

PHONE: [800] 364-9897

[734] 971-3335

FAX: [734] 971-3640

CUSTSERV@CAYMANCHEM.COM

WWW.CAYMANCHEM.COM