

PRODUCT INFORMATION



Mometasone Furoate-d₃

Item No. 33470

Formal Name: 9,21-dichloro-17-[(2-furanyl-3,4,5-d₃-carbonyl)oxy]-11β-hydroxy-16α-methyl-pregna-1,4-diene-3,20-dione

MF: C₂₇H₂₇Cl₂D₃O₆

FW: 524.5

Chemical Purity: ≥98% (Mometasone Furoate)

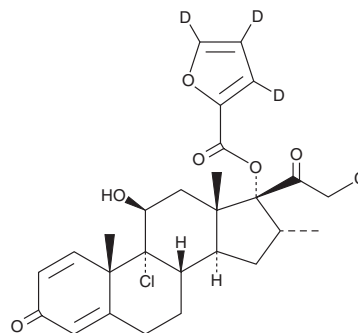
Deuterium

Incorporation: ≥99% deuterated forms (d₁-d₃); ≤1% d₀

Supplied as: A solid

Storage: -20°C

Stability: ≥2 years



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

Laboratory Procedures

Mometasone furoate-d₃ is intended for use as an internal standard for the quantification of mometasone furoate (Item No. 21365) by GC- or LC-MS. The accuracy of the sample weight in this vial is between 5% over and 2% under the amount shown on the vial. If better precision is required, the deuterated standard should be quantitated against a more precisely weighed unlabeled standard by constructing a standard curve of peak intensity ratios (deuterated versus unlabeled).

Mometasone furoate-d₃ is supplied as a solid. A stock solution may be made by dissolving the mometasone furoate-d₃ in the solvent of choice, which should be purged with an inert gas. Mometasone furoate-d₃ is soluble in a 1:1 solution of acetonitrile:methanol.

Description

Mometasone furoate is a prodrug form of the synthetic glucocorticoid mometasone (Item No. 31702).¹ Intranasal administration of mometasone furoate (1 μg/nostriil) 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 μg/ml).³ Formulations containing mometasone furoate have been used in the treatment of allergic rhinitis, atopic dermatitis, and asthma.

References

1. Smith, C.L. and Kreutner, W. In vitro glucocorticoid receptor binding and transcriptional activation by topically active glucocorticoids. *Arzneimittel-Forschung* **48(9)**, 956-960 (1998).
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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