

PRODUCT INFORMATION



Clobetasol Propionate-d₅

Item No. 33365

CAS Registry No.: 2280940-18-1
Formal Name: 21-chloro-9-fluoro-11-hydroxy-16-methyl-17-(1-oxopropoxy-2,2,3,3,3-d₅)-(11β,16β)-pregna-1,4-diene-3,20-dione

Synonyms: CCl-4725-d₅, CGP 9555-d₅, Clobetasol 17-propionate-d₅

MF: C₂₅H₂₇ClD₅FO₅
FW: 472.0

Chemical Purity: ≥98% (Clobetasol Propionate)

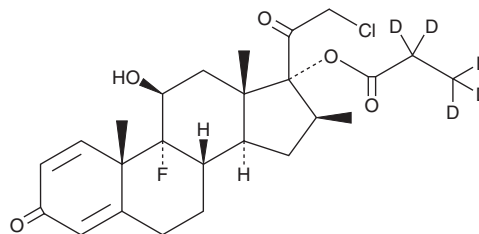
Deuterium

Incorporation: ≥99% deuterated forms (d₁-d₅); ≤1% d₀

Supplied as: A solid

Storage: -20°C

Stability: ≥4 years



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

Laboratory Procedures

Clobetasol propionate-d₅ is intended for use as an internal standard for the quantification of clobetasol propionate (Item No. 21251) 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).

Clobetasol propionate-d₅ is supplied as a solid. A stock solution may be made by dissolving the clobetasol propionate-d₅ in the solvent of choice, which should be purged with an inert gas. Clobetasol propionate-d₅ is soluble in methanol.

Description

Clobetasol propionate is a corticosteroid.¹ It binds to glucocorticoid receptors in a cell-free assay (IC₅₀ = 3.17 nM) and inhibits proliferation of primary human skin fibroblasts when used at a concentration of 5 μg/ml.^{1,2} Topical administration of clobetasol propionate reduces croton oil-induced ear edema in mice.¹ Formulations containing clobetasol propionate have been used in the treatment of inflammatory skin conditions.

References

1. Ueno, H., Maruyama, A., Miyake, M., *et al.* Synthesis and evaluation of antiinflammatory activities of a series of corticosteroid 17 α-esters containing a functional group. *J. Med. Chem.* **34(8)**, 2468-2473 (1991).
2. Ponec, M., de Haas, C., Bachra, B.N., *et al.* Effects of glucocorticosteroids on primary human skin fibroblasts. I. Inhibition of the proliferation of cultured primary human skin and mouse L929 fibroblasts. *Arch. Dermatol. Res.* **259(12)**, 117-123 (1977).

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