

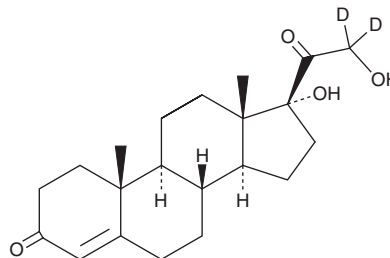
PRODUCT INFORMATION



11-deoxy Cortisol-d₂

Item No. 45693

CAS Registry No.: 1271728-08-5
Formal Name: 17,21-dihydroxy-pregn-4-ene-3,20-dione-21,21-d₂
Synonyms: Compound S-d₂, Cortexolone-d₂, Cortodoxone-d₂, Reichstein's Substance S-d₂
MF: C₂₁H₂₈D₂O₄
FW: 348.5
Chemical Purity: ≥98% (11-deoxy Cortisol)
Deuterium Incorporation: ≥99% deuterated forms (d₁-d₂); ≤1% d₀
Supplied as: A 1 mg/ml solution in methanol
Storage: -20°C
Stability: ≥4 years



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

Laboratory Procedures

11-deoxy Cortisol-d₂ is intended for use as an internal standard for the quantification of 11-deoxy cortisol 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).

Description

11-deoxy Cortisol is a precursor in the biosynthesis of cortisol (Item No. 20739).¹ It is converted into cortisol by the cytochrome P450 (CYP) isoform CYP11B1, also known as 11β-hydroxylase. Urinary levels of 11-deoxy cortisol and the ratio of 11-deoxy cortisol to cortisol are elevated in patients with 11β-hydroxylase deficiency, a type of congenital adrenal hyperplasia (CAH) characterized by cortisol deficiency and hypertension.

Reference

1. Keavney, B., Mayosi, B., Gaukrodger, N., *et al.* Genetic variation at the locus encompassing 11-β hydroxylase and aldosterone synthase accounts for heritability in cortisol precursor (11-deoxycortisol) urinary metabolite excretion. *J. Clin. Endocrinol. Metab.* **90**(2), 1072-1077 (2005).

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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