

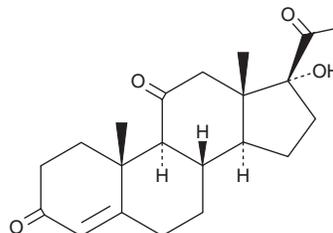
PRODUCT INFORMATION



21-Deoxycortisone

Item No. 35236

CAS Registry No.: 1882-82-2
Formal Name: 17-hydroxy-pregn-4-ene-3,11,20-trione
Synonyms: 21-Desoxycortisone, NSC 38722
MF: C₂₁H₂₈O₄
FW: 344.5
Purity: ≥95%
UV/Vis.: λ_{max}: 238 nm
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

21-Deoxycortisone is supplied as a solid. A stock solution may be made by dissolving the 21-deoxycortisone in the solvent of choice, which should be purged with an inert gas. 21-Deoxycortisone is soluble in organic solvents such as DMSO and dimethyl formamide. The solubility of 21-deoxycortisone in these solvents is approximately 1 mg/ml.

Description

21-Deoxycortisone is a corticosteroid metabolite of 11-keto progesterone.¹ It is formed from 11-keto progesterone by the cytochrome P450 (CYP) isoform CYP17A1, but can also be produced via oxidation of 21-deoxycortisol (Item No. 30873) by 11β-hydroxysteroid dehydrogenase type 2 (11β-HSD2). Levels of 21-deoxycortisone are increased in patients with congenital adrenal hyperplasia, an inborn error of metabolism characterized by a deficiency in 21-hydroxylase.²

References

1. van Rooyen, D., Yadav, R., Scott, E.E., *et al.* CYP17A1 exhibits 17αhydroxylase/17,20-lyase activity towards 11β-hydroxyprogesterone and 11-ketoprogesterone metabolites in the C11-oxy backdoor pathway. *J. Steroid Biochem. Mol. Biol.* **199**, 105614 (2020).
2. Saisho, S., Shimozawa, K., and Yata, J. Changes of several adrenal Δ⁴-steroids measured by HPLC-UV spectrometry in neonatal patients with congenital adrenal hyperplasia due to 21-hydroxylase deficiency. *Horm. Res.* **33(1)**, 27-34 (1990).

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.

WARRANTY AND LIMITATION OF REMEDY

Buyer agrees to purchase the material subject to Cayman's Terms and Conditions. Complete Terms and Conditions including Warranty and Limitation of Liability information can be found on our website.

Copyright Cayman Chemical Company, 12/12/2022

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