PRODUCT INFORMATION



β-Cortol

Item No. 33412

CAS Registry No.: 667-65-2

Formal Name: 5β-pregnane-3α,11β,17,20R,21-pentol

NSC 58792 Synonym: MF: $C_{21}H_{36}O_{5}$ FW: 368.5 **Purity:** ≥95% 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

 β -Cortol is supplied as a solid. A stock solution may be made by dissolving the β -cortol in the solvent of choice, which should be purged with an inert gas. β-Cortol is soluble in DMSO and pyridine. β-Cortol is slightly soluble in ethanol and methanol.

Description

β-Cortol is an endogenous metabolite of cortisol (hydrocortisone; Item No. 20739).^{1,2} It is formed from cortisol via the intermediate metabolite 5β-tetrahydrocortisol, which is dehydrogenated by 20β-hydroxysteroid dehydrogenase (20β-HSD) in the liver to produce β-cortol.² Urinary levels of β-cortol have been used as a marker for cortisol production and are associated with metabolic syndrome in obese individuals.3

References

- 1. Krone, N., Hughes, B.A., Lavery, G.G., et al. Gas chromatography/mass spectrometry (GC/MS) remains a pre-eminent discovery tool in clinical steroid investigations even in the era of fast liquid chromatography tandem mass spectrometry (LC/MS/MS). J. Steroid Biochem. Mol. Biol. 121(3-5), 496-504 (2010).
- 2. Schiffer, L., Barnard, L., Baranowski, E.S., et al. Human steroid biosynthesis, metabolism and excretion are differentially reflected by serum and urine steroid metabolomes: A comprehensive review. J. Steroid Biochem. Mol. Biol. 194, 105439 (2019).
- 3. Baudrand, R., Campino, C., Carvajal, C.A., et al. Increased urinary glucocorticoid metabolites are associated with metabolic syndrome, hypoadiponectinemia, insulin resistance and β cell dysfunction. Steroids **76(14)**, 1575-1581 (2011).

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

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

uyer 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, 10/20/2022

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