# PRODUCT INFORMATION



## 11α-hydroxy Testosterone

Item No. 10008647

CAS Registry No.: 3066-12-4

Formal Name: 11α,17β-dihydroxy-androst-4-en-3-one

MF:  $C_{19}H_{28}O_3$ FW: 304.4 **Purity:** ≥97% UV/Vis.:  $\lambda_{\text{max}}$ : 241 nm

Supplied as: A crystalline solid

4°C Storage: Stability: ≥4 years

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

HO

## **Laboratory Procedures**

 $11\alpha$ -hydroxy Testosterone is supplied as a crystalline solid. A stock solution may be made by dissolving the 11 $\alpha$ -hydroxy testosterone in the solvent of choice, which should be purged with an inert gas. 11 $\alpha$ -hydroxy Testosterone is soluble in the organic solvent ethanol at a concentration of approximately 1 mg/ml.

#### Description

11α-hydroxy Testosterone is a metabolite of testosterone, produced by the cytochrome P450 (CYP) isoform CYP3A. <sup>1</sup> It can also be generated from testosterone by a mutant of CYP107A1 and from  $11\alpha$ -hydroxy progesterone by the fungus B. bassiana.<sup>2,3</sup> The biological activity of this metabolite has not been elucidated.

#### References

- 1. Zhao, Q. and Li, Z. Synthesis of 11-substituted androstenediones and testosterones as human decidual cell growth inhibitors. Steroids 59(3), 190-195 (1994).
- 2. Xiang, H., Tschirret-Guth, R.A., and Ortiz de Montellano, P.R. An A245T mutation conveys on cytochrome P450eryF the ability to oxidize alternative substrates. J. Biol. Chem. 275(46), 35999-36006 (2000).
- 3. Swizdor, A., Kolek, T., Panek, A., et al. Microbial Baeyer-Villiger oxidation of steroidal ketones using Beauveria bassiana: Presence of an 11α-hydroxyl group essential to generation of D-homo lactones. Biochim. Biophys. Acta. 1811(4), 253-262 (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

Suyer 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, 10/19/2022

### **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