

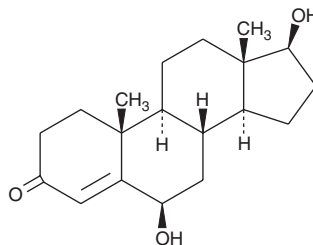
# PRODUCT INFORMATION



## 6 $\beta$ -hydroxy Testosterone

Item No. 10008519

**CAS Registry No.:** 62-99-7  
**Formal Name:** 6 $\beta$ ,17 $\beta$ -androst-4-en-3-one  
**Synonyms:** 4-Androsten-6 $\beta$ ,17 $\beta$ -diol-3-one 6 $\beta$ ,17 $\beta$ , -Dihydroxyandrost-4-en-3-one  
**MF:** C<sub>19</sub>H<sub>28</sub>O<sub>3</sub>  
**FW:** 304.4  
**Purity:**  $\geq$ 97%  
**UV/Vis.:**  $\lambda_{\text{max}}$ : 236 nm  
**Supplied as:** A crystalline solid  
**Storage:** -20°C  
**Stability:**  $\geq$ 4 years



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

### Laboratory Procedures

6 $\beta$ ,17 $\beta$ -androst-4-en-3-one is supplied as a crystalline solid. A stock solution may be made by dissolving the 6 $\beta$ ,17 $\beta$ -androst-4-en-3-one in the solvent of choice, which should be purged with an inert gas. 6 $\beta$ ,17 $\beta$ -androst-4-en-3-one is soluble in organic solvents such as ethanol, methanol, and acetonitrile. The solubility of 6 $\beta$ ,17 $\beta$ -androst-4-en-3-one in these solvents is approximately 1 mg/ml.

### Description

CYP3A4 and CYP3A5 are cytochrome P450 enzymes whose expression is induced by glucocorticoids and certain xenobiotics, including many drugs and chemical carcinogens.<sup>1</sup> They mediate the metabolism of xenobiotics as well as certain endobiotics, including steroid hormones.<sup>2</sup> 6 $\beta$ -hydroxy Testosterone is a major metabolite produced from testosterone by the actions of CYP3A4 and CYP3A5, accounting for 75-80% of all metabolites formed from testosterone.<sup>2,3</sup> The biological effects of 6 $\beta$ -hydroxy testosterone have been poorly studied.

### References

1. Cooper, B.W., Cho, T.M., Thompson, P.M., *et al.* Phthalate induction of CYP3A4 is dependent on glucocorticoid regulation of PXR expression. *Toxicol. Sci.* **103**(2), 268-277 (2008).
2. Draper, A.J., Madan, A., Smith, K., *et al.* Development of a non-high pressure liquid chromatography assay to determine testosterone hydroxylase (CYP3A) activity in human liver microsomes. *Drug Metab. Dispos.* **26**(4), 299-304 (1998).
3. Capdevila, J.H., Karara, A., Waxman, D.J., *et al.* Cytochrome P-450 enzyme-specific control of the regio- and enantiofacial selectivity of the microsomal arachidonic acid epoxygenase. *J. Biol. Chem.* **265**, 10865-10871 (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

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