

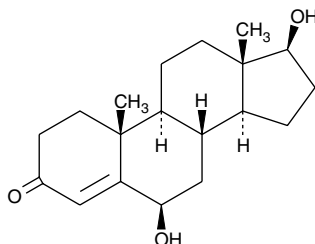
# Product Information



## 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%  
**Stability:**  $\geq$ 1 year at 4°C  
**Supplied as:** A crystalline solid  
**UV/Vis.:**  $\lambda_{\text{max}}$ : 236 nm



### Laboratory Procedures

For long term storage, we suggest that 6 $\beta$ -hydroxy testosterone be stored as supplied at 4°C. It should be stable for at least one year.

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

If aqueous stock solutions are required for biological experiments, they can best be prepared by diluting the organic solvent into aqueous buffers or isotonic saline. Ensure that the residual amount of organic solvent is insignificant, since organic solvents may have physiological effects at low concentrations. We do not recommend storing the aqueous solution for more than one day.

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).

### Related Products

For a list of related products please visit: [www.caymanchem.com/catalog/10008519](http://www.caymanchem.com/catalog/10008519)

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**WARNING: THIS PRODUCT IS FOR LABORATORY RESEARCH ONLY: NOT FOR ADMINISTRATION TO HUMANS. NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.**

#### MATERIAL SAFETY DATA

This material should be considered hazardous until information to the contrary becomes available. Do not ingest, swallow, or inhale. Do not get in eyes, on skin, or on clothing. Wash thoroughly after handling. This information contains some, but not all, of the information required for the safe and proper use of this material. Before use, the user must review the complete Material Safety Data Sheet, which has been sent via email to your institution.

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