

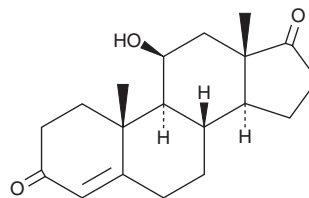
# PRODUCT INFORMATION



## 4-Androsten-11 $\beta$ -ol-3,17-dione

Item No. 30410

**CAS Registry No.:** 382-44-5  
**Formal Name:** 11 $\beta$ -hydroxy-androst-4-ene-3,17-dione  
**Synonyms:** 11 $\beta$ -Hydroxy-4-androsten-3,17-dione, NSC 12168, NSC 17102, 11OHA4, U-2826  
**MF:** C<sub>19</sub>H<sub>26</sub>O<sub>3</sub>  
**FW:** 302.4  
**Purity:**  $\geq 98\%$   
**UV/Vis.:**  $\lambda_{\text{max}}$ : 241 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

4-Androsten-11 $\beta$ -ol-3,17-dione is supplied as a crystalline solid. A stock solution may be made by dissolving the 4-Androsten-11 $\beta$ -ol-3,17-dione in the solvent of choice, which should be purged with an inert gas. 4-Androsten-11 $\beta$ -ol-3,17-dione is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide (DMF). The solubility of 4-Androsten-11 $\beta$ -ol-3,17-dione in these solvents is approximately 5, 15, and 20 mg/ml, respectively.

4-Androsten-11 $\beta$ -ol-3,17-dione is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, 4-Androsten-11 $\beta$ -ol-3,17-dione should first be dissolved in DMF and then diluted with the aqueous buffer of choice. 4-Androsten-11 $\beta$ -ol-3,17-dione has a solubility of approximately 0.14 mg/ml in a 1:6 solution of DMF:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

### Description

4-Androsten-11 $\beta$ -ol-3,17-dione is a steroid that has been found in isolated human female adrenal veins.<sup>1</sup> It is non-androgenic, however, it is metabolized to the androgenic 5 $\alpha$ -reduced C19 steroids 11-hydroxy-5 $\alpha$ -androstanedione, 11-keto-5 $\alpha$ -androstanedione, 11-hydroxydihydrotestosterone, and 11-ketodihydrotestosterone in LNCaP cells.

### Reference

1. Storbeck, K.-H., Bloem, L.M., Africander, D., *et al.* 11 $\beta$ -Hydroxydihydrotestosterone and 11-keto dihydrotestosterone, novel C19 steroids with androgenic activity: A putative role in castration resistant prostate cancer? *Mol. Cell. Endocrinol.* **377(1-2)**, 135-146 (2013).

#### 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.

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