

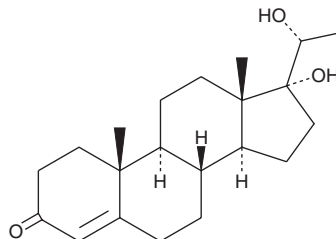
# PRODUCT INFORMATION



## 17 $\alpha$ ,20 $\beta$ -Dihydroxy-4-pregnen-3-one

Item No. 16146

**CAS Registry No.:** 1662-06-2  
**Formal Name:** 17,20R-dihydroxy-pregn-4-en-3-one  
**Synonyms:** 17 $\alpha$ ,20 $\beta$ -DHP,  
17 $\alpha$ ,20 $\beta$ -Dihydroxyprogesterone  
**MF:** C<sub>21</sub>H<sub>32</sub>O<sub>3</sub>  
**FW:** 332.5  
**Purity:**  $\geq$ 95%  
**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

17 $\alpha$ ,20 $\beta$ -Dihydroxy-4-pregnen-3-one (17 $\alpha$ ,20 $\beta$ -DHP) is supplied as a crystalline solid. A stock solution may be made by dissolving the 17 $\alpha$ ,20 $\beta$ -DHP in the solvent of choice, which should be purged with an inert gas. 17 $\alpha$ ,20 $\beta$ -DHP is soluble in organic solvents such as ethanol, methanol, and acetonitrile. The solubility of 17 $\alpha$ ,20 $\beta$ -DHP in these solvents is approximately 1 mg/ml.

### Description

17 $\alpha$ ,20 $\beta$ -DHP is an endogenous, maturation-inducing steroid that stimulates oocyte maturation in females of several teleost species. For example, 1  $\mu$ g/ml of 17 $\alpha$ ,20 $\beta$ -DHP applied to Persian sturgeon oocytes has been shown to effectively induce germinal vesicle breakdown, an essential step during oocyte maturation.<sup>1</sup> Gonadotropin-releasing hormone and the gonadotropins, follicle-stimulating hormone and luteinizing hormone, have been shown to stimulate the production of 17 $\alpha$ ,20 $\beta$ -DHP either *in vivo* or *in vitro*.<sup>2</sup> 17 $\alpha$ ,20 $\beta$ -DHP has also been reported to influence spermiation by stimulating milt production when administered at 5 mg/kg to various male teleosts.<sup>1</sup>

### References

1. Milla, S., Terrien, X., Sturm, A., *et al.* Plasma 11-deoxycorticosterone (DOC) and mineralocorticoid receptor testicular expression during rainbow trout *Oncorhynchus mykiss* spermiation: Implication with 17 $\alpha$ ,20 $\beta$ -dihydroxyprogesterone on the milt fluidity? *Reprod. Biol. Endocrinol.* **6**, 19 (2008).
2. Planas, J.V. and Swanson, P. Maturation-associated changes in the response of the salmon testis to the steroidogenic actions of gonadotropins (GTH I and GTH II) *in vitro*. *Biol. Reprod.* **52(3)**, 697-704 (1995).

#### 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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