

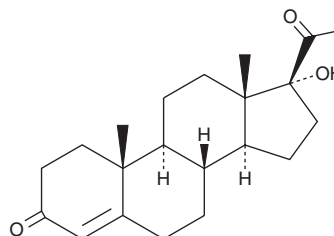
# PRODUCT INFORMATION



## 17 $\alpha$ -Hydroxyprogesterone

Item No. 33154

**CAS Registry No.:** 68-96-2  
**Formal Name:** 17-hydroxy-pregn-4-ene-3,20-dione  
**Synonyms:** NSC 15468, 17-OHP  
**MF:** C<sub>21</sub>H<sub>30</sub>O<sub>3</sub>  
**FW:** 330.5  
**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

17 $\alpha$ -Hydroxyprogesterone (17-OHP) is supplied as a crystalline solid. A stock solution may be made by dissolving the 17-OHP in the solvent of choice, which should be purged with an inert gas. 17-OHP is soluble in organic solvents such as DMSO and dimethyl formamide. The solubility of 17-OHP in these solvents is approximately 30 mg/ml.

### Description

17-OHP is a steroid and precursor in the synthesis of adrenal androgens.<sup>1,2</sup> It binds to the glucocorticoid receptor in a cell-free assay (IC<sub>50</sub> = 82 nM for the human receptor) and induces glucocorticoid receptor transactivation in HEK293 cells (EC<sub>50</sub> = 1.2  $\mu$ M).<sup>2</sup> 17-OHP (0.005-1  $\mu$ M) inhibits aldosterone-induced transactivation of the mineralocorticoid receptor in cell-based assays.<sup>1</sup> Serum levels of 17-OHP are increased in patients with congenital adrenal hyperplasia.<sup>1,2</sup>

### References

1. Mooij, C.F., Parajes, S., Pijnenburg-Kleizen, K.J., *et al.* Influence of 17-hydroxyprogesterone, progesterone and sex steroids on mineralocorticoid receptor transactivation in congenital adrenal hyperplasia. *Horm. Res. Paediatr.* **83(6)**, 414-421 (2015).
2. Pijnenburg-Kleizen, K.J., Engels, M., Mooij, C.F., *et al.* Adrenal steroid metabolites accumulating in congenital adrenal hyperplasia lead to transactivation of the glucocorticoid receptor. *Endocrinology* **156(10)**, 3504-3510 (2015).

#### 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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