

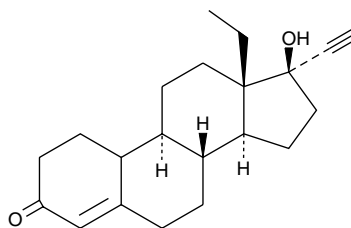
# Product Information



## Norgestrel

Item No. 10006319

**CAS Registry No.:** 6533-00-2  
**Formal Name:** (±)-13-ethyl-17.alpha.-hydroxy-18,19-dinorpregn-4-en-20-yn-3-one  
**Synonym:** Ovrette®  
**MF:** C<sub>21</sub>H<sub>28</sub>O<sub>2</sub>  
**FW:** 312.5  
**Purity:** ≥95%  
**Stability:** ≥2 years at -20°C  
**Supplied as:** A crystalline solid



### Laboratory Procedures

For long term storage, we suggest that norgestrel be stored as supplied at -20°C. It should be stable for at least two years.

Norgestrel is supplied as a crystalline solid. A stock solution may be made by dissolving the norgestrel in the solvent of choice. Norgestrel is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide (DMF), which should be purged with an inert gas. The solubility of norgestrel in these solvents is approximately 0.25, 5, and 10 mg/ml, respectively.

Norgestrel is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, norgestrel should first be dissolved in DMF and then diluted with the aqueous buffer of choice. Norgestrel has a solubility of approximately 0.25 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.

Progesterone is a steroid secreted by the corpus luteum and placenta. It is responsible for preparing the uterine lining for implantation of a fertilized ovum and to maintain pregnancy. Norgestrel is a synthetic progesterone analog (i.e., a progestin) used as an oral contraceptive, either alone (sold under the trade name Ovrette®), or in combination with estrogens such as ethinyl estradiol. It is a racemic mixture of which levonorgestrel is the biologically active component. Levonorgestrel prevents pregnancy by inhibiting ovulation and by causing the cervical mucous to thicken, which makes it harder for sperm to move toward the uterus. Levonorgestrel exhibits approximately 60 µg is sufficient to prevent ovulation and a therapeutic dose of 0.15-0.5 mg is used in hormone replacement therapy, which is about 1,000-times lower than the progesterone dose.<sup>1</sup>

### Reference

1. Stanczyk, F.Z. all progestins are not created equal. *Steroids* **68**, 879-890 (2003).

### Related Products

For a list of related products please visit: [www.caymanchem.com/catalog/10006319](http://www.caymanchem.com/catalog/10006319)

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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.

#### WARRANTY AND LIMITATION OF REMEDY

Cayman Chemical Company makes **no warranty or guarantee** of any kind, whether written or oral, expressed or implied, including without limitation, any warranty of fitness for a particular purpose, suitability and merchantability, which extends beyond the description of the chemicals hereof. Cayman warrants only to the original customer that the material will meet our specifications at the time of delivery.

Cayman will carry out its delivery obligations with due care and skill. Thus, in no event will Cayman have any **obligation or liability**, whether in tort (including negligence) or in contract, for any direct, indirect, incidental or consequential damages, even if Cayman is informed about their possible existence.

This limitation of liability does not apply in the case of intentional acts or negligence of Cayman, its directors or its employees. Buyer's **exclusive remedy** and Cayman's sole liability hereunder shall be limited to a **refund** of the purchase price, or at Cayman's option, the **replacement**, at no cost to Buyer, of all material that does not meet our specifications.

Said refund or replacement is conditioned on Buyer giving written notice to Cayman within thirty (30) days after arrival of the material at its destination. Failure of Buyer to give said notice within thirty (30) days shall constitute a waiver by Buyer of all claims hereunder with respect to said material.

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