

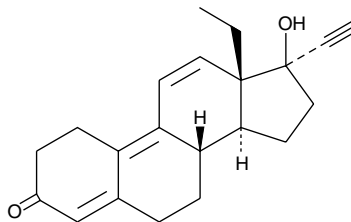
Product Information



Gestrinone

Item No. 10006488

CAS Registry No.: 16320-04-0
Formal Name: 13-ethyl-17 α -hydroxy-18,19-dinorpregna-4,9,11-trien-20-yn-3-one
MF: C₂₁H₂₄O₂
FW: 308.4
Purity: \geq 98%
Stability: \geq 2 years at -20°C
Supplied as: A crystalline solid
UV/Vis.: λ_{max} : 238, 341 nm



Laboratory Procedures

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

Gestrinone is supplied as a crystalline solid. A stock solution may be made by dissolving the gestrinone in an organic solvent purged with an inert gas. Gestrinone is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide. The solubility of gestrinone in these solvents is approximately 20 mg/ml.

Gestrinone is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, gestrinone should first be dissolved in ethanol and then diluted with the aqueous buffer of choice. Gestrinone has a solubility of approximately 0.25 mg/ml in a 1:5 solution of ethanol:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

Endometriosis is common disease characterized by the presence of endometrial tissue outside the uterus which affects approximately 10% of premenopausal women. Gestrinone is a synthetic steroid used occasional to treat endometriosis.¹ It acts centrally on the hypothalamic-pituitary system to suppress release of lutenizing hormone (LH) and follicle-stimulating hormone (FSH), thus reducing estrogen synthesis.¹ It also binds to androgen (AR), progesterone (PR), and estrogen (ER) receptors in the human endometrial tissue but not to steroid hormone binding globulin or corticord-binding globulin.² Gestrinone binds to AR and PR with EC₅₀ values of approximately 20 and 30 nM, respectively.³ These values reflect approximately 5-6 fold lower affinity than testosterone and progesterone, the natural AR and PR ligands, for these receptors.³

References

1. Moghissi, K.S. Medical treatment of endometriosis. *Clinical Obstetrics and Gynecology* **45**(3), 620-633 (1999).
2. Tamaya, T., Fujimoto, J., Watanabe, Y., *et al.* Gestrinone (R2323) binding to steroid receptors in human uterine endometrial cytosol. *Acta Obstet. Scand.* **65**, 439-441 (1986).
3. Death, A.K., McGrath, K.C.Y., Kazluskas, R., *et al.* Tetrahydrogestrinone is a potent androgen and progestin. *J. Clin. Endocrinol. Metab.* **89**(5) 2498-2500 (2004).

Related Products

For a list of related products please visit: www.caymanchem.com/catalog/10006488

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.

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