Gestrinone
Item No. 10006488

CAS Registry No.: 16320-04-0
Formal Name: 13-ethyl-17α-hydroxy-18,19-dinorpregna-4,9,11-trien-20-yn-3-one
MF: C21H24O2
FW: 308.4
Purity: ≥98%
Stability: ≥2 years at -20°C
Supplied as: A crystalline solid
UV/Vis: λmax: 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 a 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 occasionally to treat endometriosis.1 It acts centrally on the hypothalamic-pituitary system to suppress release of luteinizing 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 corticoid-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

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