

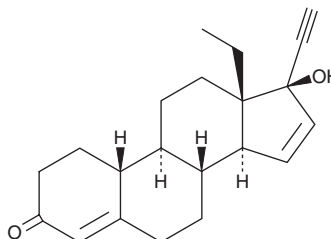
# PRODUCT INFORMATION



## Gestodene

Item No. 18217

CAS Registry No.: 60282-87-3  
Formal Name: 13-ethyl-17 $\alpha$ -hydroxy-18,19-dinorpregna-4,15-dien-20-yn-3-one  
MF: C<sub>21</sub>H<sub>26</sub>O<sub>2</sub>  
FW: 310.4  
Purity:  $\geq 98\%$   
UV/Vis.:  $\lambda_{\text{max}}$ : 239 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

Gestodene is supplied as a crystalline solid. A stock solution may be made by dissolving the gestodene in the solvent of choice, which should be purged with an inert gas. Gestodene is soluble in organic solvents such as ethanol, acetonitrile, and methanol. The solubility of gestodene in these solvents is approximately 1 mg/ml.

### Description

Gestodene is a progestin.<sup>1</sup> It selectively binds to the progesterone receptor over the estrogen receptor.<sup>2</sup> Gestodene induces transcriptional activity mediated by the progesterone receptor, and, weakly, the androgen receptor in reporter assays.<sup>3</sup> It increases the growth of MCF-7 cells when used at concentrations ranging from 0.1 to 1  $\mu\text{M}$ .<sup>4</sup> In contrast, gestodene (0.1 mg/kg) reduces tumor growth in an estrogen-dependent model of rat mammary tumors induced by DMBA (Item No. 30383). Formulations containing gestodene, in combination with ethynyl estradiol have been used as oral contraceptives.

### References

1. Stanczyk, F.Z. All progestins are not created equal. *Steroids* **68**, 879-890 (2003).
2. Pollow, K., Juchem, M., Grill, H.J., et al. Lack of binding of gestodene to estrogen receptor in human breast cancer tissue. *Eur. J. Cancer* **26**(5), 608-610 (1990).
3. Fuhrmann, U., Slater, E.P., and Fritzemeier, K.H. Characterization of the novel progestin gestodene by receptor binding studies and transactivation assays. *Contraception* **51**(1), 45-52 (1995).
4. Kloosterboer, H.J., Schoonen, W.G., Deckers, G.H.J., et al. Effects of progestagens and Org OD14 in *in vitro* and *in vivo* tumor models. *J. Steroid Biochem. Mol. Biol.* **49**(4-6), 311-318 (1994).

#### 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.

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