# PRODUCT INFORMATION

## Danazol

*Item No. 16471*

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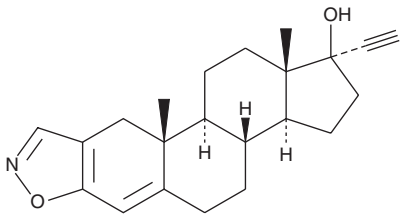
| **CAS Registry No.:** | 17230-88-5 |
| **Formal Name:** | pregna-2,4-dien-20-yno[2,3-d] isoxazol-17α-ol |
| **Synonyms:** | Danocrine, Ladogal, NSC 270916, WIN 17,757 |
| **MF:** | $C_{22}H_{27}NO_2$ |
| **FW:** | 337.5 |
| **Purity:** | ≥98% |
| **UV/Vis.:** | $\lambda_{max}$: 285 nm |
| **Supplied as:** | A crystalline solid |
| **Storage:** | -20°C |
| **Stability:** | ≥4 years |




*Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.*

### Laboratory Procedures

Danazol is supplied as a crystalline solid. A stock solution may be made by dissolving the danazol in the solvent of choice, which should be purged with an inert gas. Danazol is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide (DMF). The solubility of danazol in ethanol is approximately 20 mg/ml and approximately 30 mg/ml in DMSO and DMF.

Danazol is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, danazol should first be dissolved in DMSO and then diluted with the aqueous buffer of choice. Danazol has a solubility of approximately 0.3 mg/ml in a 1:2 solution of DMSO:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

### Description

Danazol is a derivative of testosterone (Item No. 15645) and ethisterone that can bind to androgen receptors and sex hormone-binding globulin causing a 3-fold increase in free testosterone.[1-3] It possesses weak androgenic effects and inhibits the production of gonadotropins.[4] It has been used to address symptoms of endometriosis and to inhibit the growth of endocrine-responsive pancreatic and breast cancer cells but has also been linked to the development of ovarian cancer.[2,4,5]

### References


1. Ma, R., Cotton, B., Lichtensteiger, W., *et al.* UV filters with antagonistic action at androgen receptors in the MDA-kb2 cell transcriptional-activation assay. *Toxicol. Sci.* **74(1)**, 43-50 (2003).
2. Cottreau, C.M., Ness, R.B., Modugno, F., *et al.* Endometriosis and its treatment with danazol or lupron in relation to ovarian cancer. *Clin. Cancer Res.* **9(14)**, 5142-5144 (2003).
3. Haning, R.V., Jr., Carlson, I.H., Cortes, J., *et al.* Danazol and its principal metabolites interfere with binding of testosterone, cortisol, and thyroxin by plasma proteins. *Clin. Chem.* **28(4 Pt 1)**, 696-698 (1982).
4. Peters, T.G., Lewis, J.D., Wilkinson, E.J., *et al.* Danazol therapy in hormone-sensitive mammary carcinoma. *Cancer* **40(6)**, 2797-2800 (1977).
5. Benz, C., Hollander, C., and Miller, B. Endocrine-responsive pancreatic carcinoma: Steroid binding and cytotoxicity studies in human tumor cell lines. *Cancer Res.* **46(5)**, 2276-2281 (1986).





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