

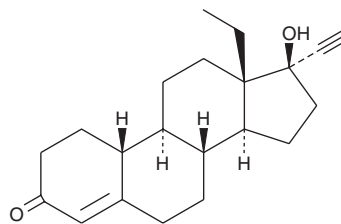
PRODUCT INFORMATION



Levonorgestrel

Item No. 10006318

CAS Registry No.: 797-63-7
Formal Name: 13-ethyl-17 α -hydroxy-18,19-dinorpregn-4-en-20-yn-3-one
MF: C₂₁H₂₈O₂
FW: 312.5
Purity: \geq 95%
UV/Vis.: λ_{max} : 240 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

Levonorgestrel is supplied as a crystalline solid. A stock solution may be made by dissolving the levonorgestrel in the solvent of choice, which should be purged with an inert gas. Levonorgestrel is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide (DMF). The solubility of levonorgestrel is approximately 0.2 mg/ml in ethanol, and approximately 5 mg/ml in DMSO and DMF.

Levonorgestrel is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, levonorgestrel should first be dissolved in DMSO and then diluted with the aqueous buffer of choice. Levonorgestrel 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

Levonorgestrel is a synthetic progestin and the biologically active component of norgestrel (Item No. 10006319).¹ *In vivo*, levonorgestrel (60 μ g/day) suppresses estrus and pregnancy in female cats.² Post-coital insertion of subdermal levonorgestrel (5 mg pellet) implants prevents uterine implantation of embryos in mice.³ Formulations containing levonorgestrel have been used as contraceptives.

References

1. Jones, R.C., Singer, A.C., and Edgren, R.A. The biological activities of norgestrel and its enantiomers. *Int. J. Fertil.* **24(1)**, 39-43 (1979).
2. Baldwin, C.J., Peter, A.T., Bosu, W.T., *et al.* The contraceptive effects of levonorgestrel in the domestic cat. *Lab. Anim. Sci.* **44(3)**, 261-269 (1994).
3. Shirley, B., Bundren, J.C., and McKinney, S. Levonorgestrel as a postcoital contraceptive. *Contraception* **52(2)**, 277-281 (1995).

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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