

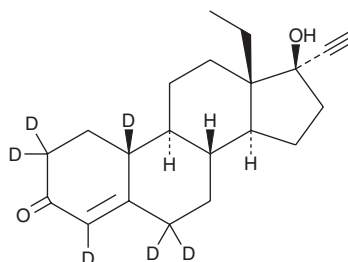
PRODUCT INFORMATION



Levonorgestrel-d₆

Item No. 25231

CAS Registry No.: 2376035-98-0
Formal Name: (17 α)-13-ethyl-17-hydroxy-18,19-dinorpregn-4-en-20-yn-3-one-2,2,4,6,6,10-d₆
MF: C₂₁H₂₂D₆O₂
FW: 318.5
Chemical Purity: ≥98% (Levonorgestrel)
Deuterium Incorporation: ≥99% deuterated forms (d₁-d₆); ≤1% d₀
Supplied as: A 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

Levonorgestrel-d₆ is intended for use as an internal standard for the quantification of levonorgestrel (Item No. 10006318) by GC- or LC-MS. The accuracy of the sample weight in this vial is between 5% over and 2% under the amount shown on the vial. If better precision is required, the deuterated standard should be quantitated against a more precisely weighed unlabeled standard by constructing a standard curve of peak intensity ratios (deuterated versus unlabeled).

Levonorgestrel-d₆ is supplied as a solid. A stock solution may be made by dissolving the levonorgestrel-d₆ in the solvent of choice, which should be purged with an inert gas. Levonorgestrel-d₆ is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide (DMF). The solubility of levonorgestrel-d₆ in ethanol is approximately 0.5 mg/ml and approximately 5 mg/ml in DMSO and DMF.

Description

Levonorgestrel is a synthetic progestin and the biologically active component of norgestrel (Item No. 10006319).¹ *In vivo*, levonorgestrel (60 µg/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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