

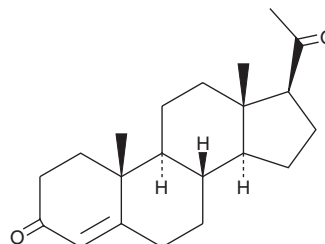
PRODUCT INFORMATION



Progesterone

Item No. 15876

CAS Registry No.: 57-83-0
Formal Name: pregn-4-ene-3,20-dione
Synonyms: Cyclogest, NSC 9704, NSC 64377
MF: C₂₁H₃₀O₂
FW: 314.5
Purity: ≥98%
UV/Vis.: λ_{max}: 239 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

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

Description

Progesterone, along with pregnenolone, is the biosynthetic precursor of all other steroid hormones. Progesterone is synthesized from cholesterol by the sequential action of desmolase in the mitochondria, which produces pregnenolone, followed by Δ^{4,5}-isomerase in the outer mitochondrial membrane and smooth endoplasmic reticulum of steroid-secreting cells.¹ Progesterone activates the human progesterone receptor with an EC₅₀ value of 0.5 nM.²

References

1. Erickson, G.F. The ovary: Basic principles and concepts. A. Physiology. *Endocrinology and Metabolism*. Felig, P., Baxter, J. D., and Frohman, L. A., editors, 3rd edition, McGraw-Hill, Inc. (1995).
2. Pedram, B., van Oeveren, A., Mais, D.E., et al. A tissue-selective nonsteroidal progesterone receptor modulator: 7,9-Difluoro-5-(3-methylcyclohex-2-enyl)-2,2,4-trimethyl-1,2-dihydrochromeno[3,4-f]quinoline. *J. Med. Chem.* **51(13)**, 3696-3699 (2008).

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.

WARRANTY AND LIMITATION OF REMEDY

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