**Product Information**

**Progesterone**

*Item No. 15876*

CAS Registry No.: 57-83-0  
Formal Name: pregn-4-ene-3,20-dione  
Synonyms: Crinone®, Cyclogest, Endometrin®, NSC 9704, NSC 64377, Utrogestan®  
MF: C₂₁H₃₀O₂  
FW: 314.5  
Purity: ≥98%  
Stability: ≥2 years at -20°C  
Supplied as: A crystalline solid  
UV/Vis: λ<sub>max</sub> 239 nm

**Laboratory Procedures**

For long term storage, we suggest that progesterone be stored as supplied at -20°C. It should be stable for at least two years.

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

Progesterone is sparingly soluble in aqueous solutions. To enhance aqueous solubility, dilute the organic solvent solution into aqueous buffers or isotonic saline. If performing biological experiments, ensure the residual amount of organic solvent is insignificant, since organic solvents may have physiological effects at low concentrations. We do not recommend storing the aqueous solution for more than one day.

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 Δ⁴-5-isomerase in the outer mitochondrial membrane and smooth endoplasmic reticulum of steroid-secreting cells. Progesterone activates the human progesterone receptor with an EC₂₀ value of 0.5 nM.

**References**


**Related Products**

For a list of related products please visit: [www.caymanchem.com/catalog/15876](http://www.caymanchem.com/catalog/15876)

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**WARNING:** This product is for laboratory research only; not for administration to humans. Not for human or veterinary diagnostic or therapeutic use.

**S.A.F.E.T.Y. D.A.T.A.**

This material should be considered hazardous until information to the contrary becomes available. Do not ingest, swallow, or inhale. Do not get in eyes, on skin, or on clothing. Wash thoroughly after handling. This information contains some, but not all, of the information required for the safe and proper use of this material. Before use, the user must review the complete Safety Data Sheet, which has been sent via email to your institution.

**W.A.R.R.A.N.T.Y AND LIMITATION OF REMEDY**

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**This limitation of liability does not apply in the case of intentional acts or negligence of Cayman, its directors or its employees.**

Buyer’s exclusive remedy and Cayman’s sole liability hereunder shall be limited to a refund of the purchase price, or at Cayman’s option, the replacement, at no cost to Buyer, of all material that does not meet our specifications. Said refund or replacement is conditioned on Buyer giving written notice to Cayman within thirty (30) days after arrival of the material at its destination. Failure of Buyer to give said notice within thirty (30) days shall constitute a waiver by Buyer of all claims heretofore with respect to said material.

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