

Certificate of Analysis

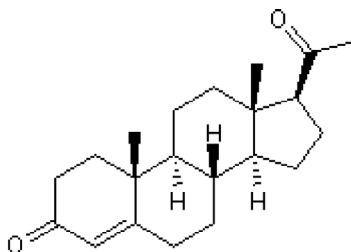
www.tocris.com

Product Name: Progesterone
CAS Number: 57-83-0
IUPAC Name: Pregn-4-ene-3,20-dione

Catalog No.: 2835
Batch No.: 3
EC Number: 200-350-6

1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula: C₂₁H₃₀O₂
Batch Molecular Weight: 314.46
Physical Appearance: White solid
Solubility: DMSO to 100 mM
ethanol to 100 mM
Storage: Store at RT
Batch Molecular Structure:



2. ANALYTICAL DATA

HPLC: Shows 99.8% purity
¹H NMR: Consistent with structure
Mass Spectrum: Consistent with structure
Optical Rotation: [α]_D = +178.7 (Concentration = 2, Solvent = Dioxane)
Microanalysis:

	Carbon Hydrogen Nitrogen		
Theoretical	80.21	9.62	0
Found	80.53	9.7	0

Caution - Not Fully Tested • Research Use Only • Not For Human or Veterinary Use

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Product Information

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Product Name: Progesterone

Catalog No.: 2835

Batch No.: 3

CAS Number: 57-83-0

EC Number: 200-350-6

IUPAC Name: Pregn-4-ene-3,20-dione

Description:

Progesterone is an endogenous progesterone receptor (PR) agonist ($EC_{50} = 0.5 \text{ nM}$).

Physical and Chemical Properties:

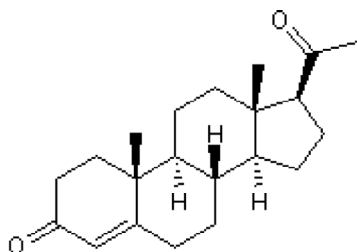
Batch Molecular Formula: $C_{21}H_{30}O_2$

Batch Molecular Weight: 314.46

Physical Appearance: White solid

Minimum Purity: ≥98%

Batch Molecular Structure:



Storage: Store at RT

CAUTION - This product is light sensitive and we recommend that the solid material and any solutions obtained are protected from exposure to light.

Solubility & Usage Info:

DMSO to 100 mM

ethanol to 100 mM

Stability and Solubility Advice:

Some solutions can be difficult to obtain and can be encouraged by rapid stirring, sonication or gentle warming (in a 45-60°C water bath).

Information concerning product stability, particularly in solution, has rarely been reported and in most cases we can only offer a general guide. *Unless contradicted by product-specific protocols or instructions, our standard recommendations apply:

SOLIDS: Provided storage is as stated on the product label and the vial is kept tightly sealed, the product can be stored for up to 6 months from date of receipt.

SOLUTIONS: We recommend that stock solutions, once prepared, are stored aliquoted in tightly sealed vials at -20°C or below and used within 1 month. Wherever possible solutions should be made up and used on the same day.

References:

Jerry (2007) Roles of estrogen and progesterone in breast cancer prevention. *Breast Cancer Res.* **9** 102. PMID: 17381827.

Dong et al (2004) Characterization of a new class of selective nonsteroidal progesterone receptor agonist. *Steroids* **69** 201. PMID: 15072922.

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