



# **Certificate of Analysis**

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Product Name: Progesterone Catalog No.: 2835 Batch No.: 2

CAS Number: 57-83-0

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

# 1. PHYSICAL AND CHEMICAL PROPERTIES

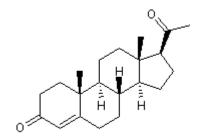
Batch Molecular Formula: $C_{21}H_{30}O_2$ Batch Molecular Weight:314.46Physical Appearance:White solid

Solubility: DMSO to 100 mM

ethanol to 100 mM

Storage: Store at RT

**Batch Molecular Structure:** 



# 2. ANALYTICAL DATA

HPLC: Shows 99.4% purity

<sup>1</sup>H NMR: Consistent with structure

Mass Spectrum: Consistent with structure

**Optical Rotation:**  $[\alpha]_D = +181.7$  (Concentration = 2, Solvent = Dioxane)

Microanalysis: Carbon Hydrogen Nitrogen

Theoretical 80.21 9.62 Found 80.29 9.95



# **Product Information**

Print Date: Sep 28th 2016

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

### **Description:**

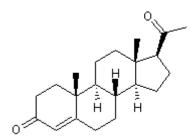
Endogenous progesterone receptor (PR) agonist (EC<sub>50</sub> = 0.5

#### **Physical and Chemical Properties:**

Batch Molecular Formula: C<sub>21</sub>H<sub>30</sub>O<sub>2</sub> Batch Molecular Weight: 314.46 Physical Appearance: White solid

Minimum Purity: >99%

#### **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. Our standard recommendations are:

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.