

**Product Name:** Corticosterone

CAS Number: 50-22-6

IUPAC Name: (11 $\beta$ )-11,21-Dihydroxypregn-4-ene-3,20-dione

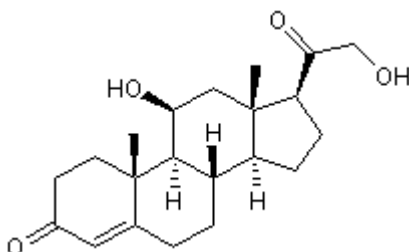
**Catalog No.:** 3685

EC Number: 200-019-6

**Batch No.:** 1

**1. PHYSICAL AND CHEMICAL PROPERTIES**

**Batch Molecular Formula:** C<sub>21</sub>H<sub>30</sub>O<sub>4</sub>  
**Batch Molecular Weight:** 346.46  
**Physical Appearance:** White solid  
**Solubility:** DMSO to 100 mM  
 ethanol to 10 mM  
**Storage:** Store at RT  
**Batch Molecular Structure:**



**2. ANALYTICAL DATA**

**Melting Point:** Between 181 - 182°C  
**HPLC:** Shows 99.7% purity  
**<sup>1</sup>H NMR:** Consistent with structure  
**Mass Spectrum:** Consistent with structure  
**Optical Rotation:** [α]<sub>D</sub> = +225.2 (Concentration = 1, Solvent = Ethanol)  
**Microanalysis:**

|             | Carbon | Hydrogen | Nitrogen |
|-------------|--------|----------|----------|
| Theoretical | 72.8   | 8.73     |          |
| Found       | 72.87  | 8.75     |          |

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

**Product Name:** Corticosterone

**Catalog No.:** 3685

**Batch No.:** 1

CAS Number: 50-22-6

EC Number: 200-019-6

IUPAC Name: (11 $\beta$ )-11,21-Dihydroxypregn-4-ene-3,20-dione

**Description:**

Endogenous glucocorticoid that acts as an agonist at glucocorticoid and mineralocorticoid receptors.

**Physical and Chemical Properties:**

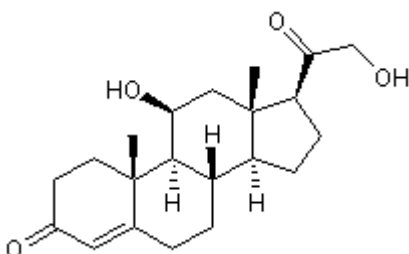
Batch Molecular Formula: C<sub>21</sub>H<sub>30</sub>O<sub>4</sub>

Batch Molecular Weight: 346.46

Physical Appearance: White solid

**Minimum Purity:** >99%

**Batch Molecular Structure:**



**References:**

Lu *et al* (2006) International union of pharmacology. LXV. The pharmacology and classification of the nuclear receptor superfamily: glucocorticoid, mineralocorticoid, progesterone, and androgen receptors. *Pharmacol.Rev.* **58** 782. PMID: 17132855.

**Storage:** Store at RT

**Solubility & Usage Info:**

DMSO to 100 mM

ethanol to 10 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.

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

Tocris Bioscience is an R&D Systems company

USA & CANADA Tel: (800) 343-7475 EUROPE Tel: +44 (0)1235 529449 CHINA Tel: +86 (21) 52380373

[www.RnDSystems.com](http://www.RnDSystems.com)