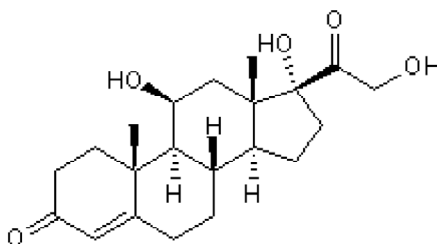


**Product Name:** Hydrocortisone  
**CAS Number:** 50-23-7  
**IUPAC Name:** 11 $\beta$ ,17 $\alpha$ ,21-Trihydroxypregn-4-ene-3,20-dione

**Catalog No.:** 4093  
**Batch No.:** 5  
**EC Number:** 200-020-1

**1. PHYSICAL AND CHEMICAL PROPERTIES**

**Batch Molecular Formula:** C<sub>21</sub>H<sub>30</sub>O<sub>5</sub>  
**Batch Molecular Weight:** 362.46  
**Physical Appearance:** White solid  
**Solubility:** DMSO to 100 mM  
ethanol to 25 mM  
**Storage:** Store at RT  
**Batch Molecular Structure:**

**2. ANALYTICAL DATA**

**HPLC:** Shows 98.7% purity  
**<sup>1</sup>H NMR:** Consistent with structure  
**Mass Spectrum:** Consistent with structure

**Microanalysis:**

	Carbon	Hydrogen	Nitrogen
Theoretical	69.59	8.34	0
Found	69.73	8.41	0

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

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**Catalog No.:** 4093

**5**

CAS Number: 50-23-7

EC Number: 200-020-1

IUPAC Name: 11 $\beta$ ,17 $\alpha$ ,21-Trihydroxypregn-4-ene-3,20-dione

**Description:**

Hydrocortisone is an adrenal glucocorticoid released in the stress response. Increases glucose production by gluconeogenesis. Immunosuppressant and antidiuretic hormone. Used in protocols to generate retinal pigment epithelial (RPE) cells from PSCs.

**Physical and Chemical Properties:**

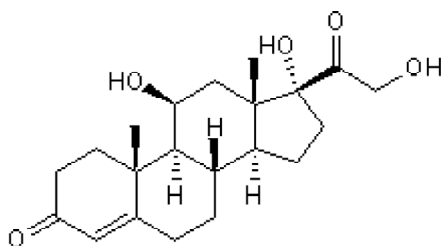
Batch Molecular Formula: C<sub>21</sub>H<sub>30</sub>O<sub>5</sub>

Batch Molecular Weight: 362.46

Physical Appearance: White solid

**Minimum Purity:** ≥98%

**Batch Molecular Structure:**



**References:**

**Surendran *et al*** (2022) An improved protocol for generation and characterization of human-induced pluripotent stem cell-derived retinal pigment epithelium cells STAR Protoc. **3** 101803. PMID: 36386870.

**Khani and Tayek** (2001) Cortisol increases gluconeogenesis in humans; its role in the metabolic syndrome. Clin.Sci.(Lond) **101** 739. PMID: 11724664.

**Storage:** Store at RT

**Solubility & Usage Info:**

DMSO to 100 mM

ethanol to 25 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.

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