

Certificate of Analysis

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Product Name: RU 28318, potassium salt

Catalog No.: 1672

Batch No.: 1

CAS Number: 76676-34-1

IUPAC Name: (7 α ,17 α)-17-Hydroxy-3-oxo-7-propylpregn-4-ene-21-carboxylic acid, potassium salt

1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula: C₂₅H₃₇O₄K.1½H₂O

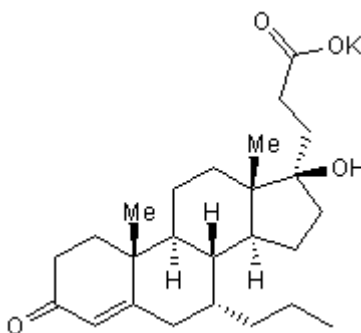
Batch Molecular Weight: 463.18

Physical Appearance: White solid

Solubility: water to 100 mM
ethanol to 100 mM
DMSO to 10 mM

Storage: Desiccate at +4°C

Batch Molecular Structure:



2. ANALYTICAL DATA

TLC: R_f = 0.75 (Ethyl acetate)

Melting Point: Between 268 - 270°C(dec)

HPLC: Shows 98.2% purity

¹H NMR: Consistent with structure

¹³C NMR: Consistent with structure

Optical Rotation: [α]_D = +49 (Concentration = 1, Solvent = Water)

Microanalysis:

Carbon Hydrogen Nitrogen

Theoretical 64.83 8.6

Found 64.89 8.66

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

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Description:

Potent and selective antagonist for the mineralocorticoid receptor (MR). Inhibits aldosterone production and secretion, and selectively decreases ex-vivo MR binding in the hippocampus of adrenalectomised rats. Also decreases blood pressure in female rats following central administration in vivo.

Physical and Chemical Properties:

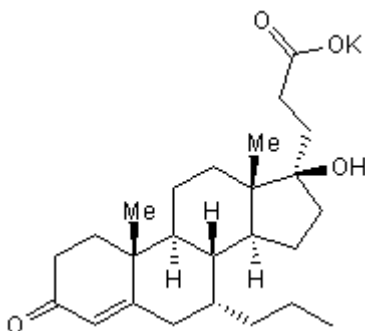
Batch Molecular Formula: C₂₅H₃₇O₄K.1¼H₂O

Batch Molecular Weight: 463.18

Physical Appearance: White solid

Minimum Purity: >98%

Batch Molecular Structure:



References:

Perroteau et al (1984) The effect of the antimineralocorticoid RU 28318 on aldosterone biosynthesis *in vitro*. *J.Steroid Biochem.* **20** 853. PMID: 6323881.

Kim et al (1998) Evaluation of RU28318 and RU40555 as selective mineralocorticoid receptor and glucocorticoid receptor antagonists, respectively: receptor measures and functional studies. *J.Steroid Biochem.Mol.Biol.* **67** 213. PMID: 9879980.

Rahmouni et al (1999) Cardiovascular and renal effects of central administration of a mineralocorticoid receptor antagonist in conscious female rats. *Eur.J.Pharmacol.* **385** 199. PMID: 10607876.

Storage: Desiccate at +4°C

Solubility & Usage Info:

water to 100 mM
ethanol to 100 mM
DMSO 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.

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