

Certificate of Analysis

Print Date: Mar 22nd 2022

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Product Name: Spironolactone Catalog No.: 2968 Batch No.: 2

CAS Number: 52-01-7 EC Number: 200-133-6

IUPAC Name: $(7\alpha,17\alpha)$ -7-(Acetylthio)-17-hydroxy-3-oxopregn-4-ene-21-carboxylic acid γ -lactone

1. PHYSICAL AND CHEMICAL PROPERTIES

C24H32O4S. **Batch Molecular Formula: Batch Molecular Weight:** 416.57 **Physical Appearance:** White solid

Solubility: DMSO to 100 mM

ethanol to 50 mM

Storage: Store at RT

Batch Molecular Structure:

2. ANALYTICAL DATA

HPLC: Shows 99.5% purity

¹H NMR: Consistent with structure Mass Spectrum: Consistent with structure

Optical Rotation: $[\alpha]_D$ = -37.4 (Concentration = 1, Solvent = Chloroform)

Microanalysis: Carbon Hydrogen Nitrogen

> Theoretical 69.2 7.74 Found 69.24 7.74



Product Information

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Description:

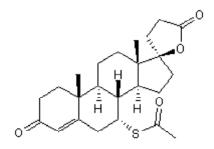
Spironolactone is a competitive mineralocorticoid (aldosterone) receptor antagonist that exhibits antihypertensive activity in vivo. Also displays antiandrogen activity and inhibits steroid hormone biosynthesis.

Physical and Chemical Properties:

Batch Molecular Formula: C₂₄H₃₂O₄S. Batch Molecular Weight: 416.57 Physical Appearance: White solid

Minimum Purity: ≥98%

Batch Molecular Structure:



Storage: Store at RT

Solubility & Usage Info:

DMSO to 100 mM ethanol to 50 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:

Ye et al (2009) Contrasting effects of epler. and spironola. on adrenal cell steroidogenesis. Horm.Metab.Res. 41 35. PMID: 18819053. Struthers et al (2008) A comparison of the aldosterone-blocking agents eplernone and spironola. Clin.Cardiol. 31 153. PMID: 18404673. Delyani et al (2000) Mineralocorticoid receptor antagonists: the evolution of utility and pharmacology. Kidney Int. 57 1408. PMID: 10760075.

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