

## Spironolactone

## Chemical Properties

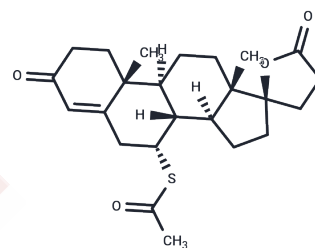
CAS No. :

Formula: C<sub>24</sub>H<sub>32</sub>O<sub>4</sub>S

Molecular Weight: 416.57

Appearance: no data available

Storage: Powder: -20°C for 3 years | In solvent: -80°C for 1 year



## Biological Description

|               |   |
|---------------|---|
| Description   | Spironolactone (SC9420) is an Aldosterone Antagonist. The mechanism of action of spironolactone is as an Aldosterone Antagonist.  |
| Targets(IC50) | Glucocorticoid Receptor, Androgen Receptor, Autophagy   |
| In vitro      | Spironolactone inhibits the specific binding of stanozololone in the nucleus and prostate cytoplasm of the rat prostate. Spironolactone is a strong AR antagonist with an IC <sub>50</sub> of 77 nM, a weak GR antagonist with an IC <sub>50</sub> of 2.4 μM, and a weak PR agonist with an EC <sub>50</sub> of 740 nM. |
| In vivo       | Spironolactone inhibits the specific binding of stanozololone in the nucleus and prostate cytoplasm of the rat prostate. Spironolactone is a strong AR antagonist with an IC <sub>50</sub> of 77 nM, a weak GR antagonist with an IC <sub>50</sub> of 2.4 μM, and a weak PR agonist with an EC <sub>50</sub> of 740 nM. |

## Solubility Information

|            |   |
|------------|---|
| Solubility | Ethanol: 20.8 mg/mL (49.93 mM), Sonication is recommended.<br>DMSO: 45 mg/mL (108.03 mM), Sonication is recommended.<br>(< 1 mg/ml refers to the product slightly soluble or insoluble) |
|------------|---|

## Preparing Stock Solutions

|       | 1mg       | 5mg        | 10mg       |
|-------|-----------|------------|------------|
| 1 mM  | 2.4006 mL | 12.0028 mL | 24.0056 mL |
| 5 mM  | 0.4801 mL | 2.4006 mL  | 4.8011 mL  |
| 10 mM | 0.2401 mL | 1.2003 mL  | 2.4006 mL  |
| 50 mM | 0.048 mL  | 0.2401 mL  | 0.4801 mL  |

Please select the appropriate solvent to prepare the stock solution, according to the solubility of the product in different solvents. Please use it as soon as possible.

### Reference

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Zeng X, Zhu S, Lu W, et al. Target identification among known drugs by deep learning from heterogeneous networks. Chemical Science. 2020, 11(7): 1775-1797.

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