Data Sheet (Cat.No.T0476)

TargetMol

Spironolactone

Chemical Properties

CAS No. : 52-01-7

Formula: C24H32O4S

Molecular Weight: 416.57

Storage: Powder: -20°C for 3 years | In solvent: -80°C for 1 year
Actual storage temperature shall be subject to the COA.

Biological Description

Description	Spironolactone (SC9420) is an Aldosterone Antagonist. The mechanism of action of spironolactone is as an Aldosterone Antagonist.
Targets(IC50)	Glucocorticoid Receptor,Calcium Channel,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 IC50 of 77 nM, a weak GR antagonist with an IC50 of 2.4 μM, and a weak PR agonist with an EC50 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 IC50 of 77 nM, a weak GR antagonist with an IC50 of 2.4 μM, and a weak PR agonist with an EC50 of 740 nM.

Solubility Information

Solubility	Ethanol: 20.8 mg/mL (49.93 mM),Sonication is recommended. DMSO: 250 mg/mL (600.14 mM),Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)
In vivo Formulation	10% DMSO+40% PEG300+5% Tween 80+45% Saline: 2 mg/mL (4.8 mM),Sonication is recommended. *Please add the solvents sequentially, clarifying the solution as much as possible before adding the next one. Dissolve by heating and/or sonication if necessary. Working solution is recommended to be prepared and used immediately. The formulation provided above is for reference purposes only. In vivo formulations may vary and should be modified based on specific experimental conditions.*

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.

Note: The dilution table applies only to solid products. For liquid products, please calculate the stock solution based on the stated concentration and/or density.

Reference

Fagart J, et al. J Biol Chem, 2010, 285(39), 219932-219940.
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.
Bonne C, et al. Mol Cell Endocrinol, 1974, 2(1), 59-67.
Zeng X, Zhu S, Lu W, et al. Target identification among known drugs by deep learning from heterogeneous networks[J]. Chemical Science. 2020, 11(7): 1775-1797.