

Aldosterone

Chemical Properties

CAS No. :	52-39-1
Formula:	C ₂₁ H ₂₈ O ₅
Molecular Weight:	360.44
Storage:	Store at low temperature Powder: -20°C for 3 years In solvent: -80°C for 1 year <small>Actual storage temperature shall be subject to the COA.</small>

Biological Description

Description	Aldosterone, the primary mineralocorticoid, is synthesized and secreted by the zona glomerulosa of the adrenal cortex in response to activation of the renin-angiotensin system or high dietary potassium.
Targets(IC50)	Others,Endogenous Metabolite
In vitro	Aldosterone (1-1000 nM; 24 hours) dose-dependently inhibits interleukin-1 β -stimulated nitrite production in vascular smooth muscle cells [3].
In vivo	Aldosterone (1 mg/Kg+1% NaCl; i.h.; once daily for 3 weeks) significantly increases systolic blood pressure (SBP), diastolic blood pressure (DBP), left ventricular systolic pressure (LVSP), and left ventricular end-diastolic pressure (LVEDP) [4]. Aldosterone (0.72 mg/kg/day; 14 days) causes a small increase (14 mmHg) in blood pressure in male mice [5].

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	2.7744 mL	13.8719 mL	27.7439 mL
5 mM	0.5549 mL	2.7744 mL	5.5488 mL
10 mM	0.2774 mL	1.3872 mL	2.7744 mL
50 mM	0.0555 mL	0.2774 mL	0.5549 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

- Nanba K, et al. Aging and Adrenal Aldosterone Production. Hypertension. 2018 Feb;71(2):218-223.
- Cannavo A, et al. Aldosterone and Mineralocorticoid Receptor System in Cardiovascular Physiology and Pathophysiology. Oxid Med Cell Longev. 2018 Sep 19;2018:1204598.
- Ikeda U, et al. Aldosterone inhibits nitric oxide synthesis in rat vascular smooth muscle cells induced by interleukin-1 beta. Eur J Pharmacol. 1995 Jul 18;290(2):69-73.
- Martín-Fernández B, et al. Beneficial effects of proanthocyanidins in the cardiac alterations induced by aldosterone in rat heart through mineralocorticoid receptor blockade. PLoS One. 2014 Oct 29;9(10):e111104.
- Dinh QN, et al. Aldosterone-induced oxidative stress and inflammation in the brain are mediated by the endothelial cell mineralocorticoid receptor. Brain Res. 2016 Apr 15;1637:146-153.

Inhibitor · Natural Compounds · Compound Libraries · Recombinant Proteins

This product is for Research Use Only · Not for Human or Veterinary or Therapeutic Use

Tel:781-999-4286 E_mail:info@targetmol.com Address:34 Washington Street,Wellesley Hills,MA 02481