Mineralocorticoid Receptor

Mineralocorticoid receptor (MR) is an intracellular steroid hormone receptor, and a member of the nuclear receptor superfamily, that mediates the physiological action of two important adrenal steroids, aldosterone and cortisol. Mineralocorticoid receptor is closely related to the glucocorticoid receptor (GR), and it can indifferently bind mineralocorticoid and glucocorticoid hormones. Activation of the mineralocorticoid receptor in the distal nephron by its ligand, aldosterone, plays an important role in sodium reabsorption and blood pressure regulation. Besides the regulation of sodium balance and the control of blood pressure, aldosterone-human mineralocorticoid receptor tandem also exerts important regulatory functions on the cardiovascular and central nervous systems.

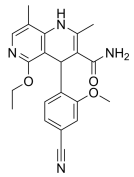
Mineralocorticoid receptor participates in the regulation of hydroelectrolytic homeostasis in sodium-transporting tight epithelia such as distal nephron, colon, lung, and salivary and sweat glands. In such epithelial target cells, the mineralocorticoid specificity of aldosterone action is given by the enzyme 11β-hydroxysteroid dehydrogenase 2 (11-HSD2), which converts active glucocorticoids into inactive metabolites. Mineralocorticoid receptor is also expressed in nonepithelial tissues such as the heart, some areas of the brain, large blood vessels, and mononuclear leukocytes. The ligand-activated mineralocorticoid receptor is translocated in the nucleus and acts as a transcription factor after its interaction with the consensus glucocorticoid response element (GRE) sequences. Mineralocorticoid receptor could activate or inhibit transcription of target genes whose identification is under intense investigation.

Mineralocorticoid Receptor Inhibitors, Agonists, Antagonists & Modulators

(Rac)-Finerenone

((Rac)-BAY 94-8862) Cat. No.: HY-111372A

(Rac)-Finerenone ((Rac)-BAY 94-8862) is the racemate of Finerenone. Finerenone is a third-generation, selective, and orally available nonsteroidal mineralocorticoid receptor (MR) antagonist (IC_{50}=18 nM).

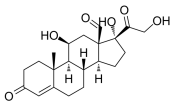


Purity: 99.66%
Clinical Data: No Development Reported
Size: 10 mM × 1 mL, 5 mg, 10 mg, 25 mg, 50 mg, 100 mg

18-Oxocortisol

Cat. No.: HY-113151

18-Oxocortisol is a derivative of cortisol that is produced by aldosterone synthase (CYP11B2). 18-Oxocortisol is a naturally occurring **mineralocorticoid** agonist. 18-Oxocortisol is a biomarker in adrenal vein sampling.

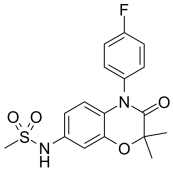


Purity: ≥98.0%
Clinical Data: No Development Reported
Size: 1 mg

Apararenone

(MT-3995) Cat. No.: HY-109002

Apararenone (MT-3995) is a novel non-steroidal **mineralocorticoid receptor** antagonists under development for the treatment of diabetic nephropathies and non-alcoholic steatohepatitis.

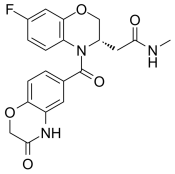


Purity: 98.98%
Clinical Data: Phase 2
Size: 10 mM × 1 mL, 5 mg, 10 mg, 25 mg, 50 mg, 100 mg

AZD9977

Cat. No.: HY-120274

AZD9977 is a potent, selective, and orally active **mineralocorticoid receptor (MR)** modulator. AZD9977 is used for heart failure, and chronic kidney disease research.

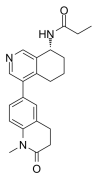


Purity: 99.85%
Clinical Data: No Development Reported
Size: 5 mg, 10 mg, 25 mg, 50 mg, 100 mg

Baxdrostat

Cat. No.: HY-132809

Baxdrostat is a **aldosterone synthase** inhibitor.

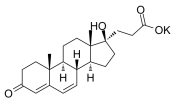


Purity: >98%
Clinical Data: No Development Reported
Size: 5 mg, 10 mg, 25 mg, 50 mg, 100 mg

Canrenoate potassium

(Aldadiene potassium; SC-14266) Cat. No.: HY-B1582A

Canrenoate (Aldadiene) potassium, a prodrug that releases canrenone, is a potent, competitive **mineralocorticoid receptor (aldosterone receptor)** antagonist. Potassium canrenoate, as a diuretic, is used for the research of hypertension.

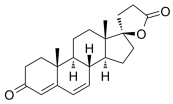


Purity: 99.37%
Clinical Data: Launched
Size: 10 mM × 1 mL, 500 mg

Canrenone

(Aldadiene; SC9376) Cat. No.: HY-B1438

Canrenone (Aldadiene) is an **aldosterone** antagonist extensively used as a diuretic agent.

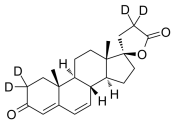


Purity: 99.54%
Clinical Data: Launched
Size: 10 mM × 1 mL, 50 mg

Canrenone-d4

(Aldadiene-d4; SC9376-d4) Cat. No.: HY-B1438S1

Canrenone-d4 is deuterium labeled Canrenone. Canrenone (Aldadiene) is an aldosterone antagonist extensively used as a diuretic agent.

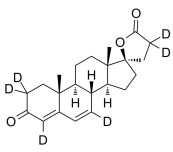


Purity: >98%
Clinical Data: No Development Reported
Size: 1 mg, 5 mg

Canrenone-d6

(Aldadiene-d6; SC9376-d6) Cat. No.: HY-B1438S

Canrenone-d6 (Aldadiene-d6) is the deuterium labeled Canrenone. Canrenone (Aldadiene) is an **aldosterone** antagonist extensively used as a diuretic agent.

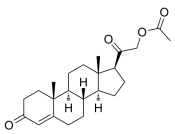


Purity: >98%
Clinical Data: No Development Reported
Size: 1 mg, 5 mg

Deoxycorticosterone acetate (11-Deoxycorticosterone acetate; DOC acetate; Cortexone acetate)

Cat. No.: HY-B1472

Deoxycorticosterone acetate is a steroid hormone produced by the adrenal gland that possesses mineralocorticoid activity and acts as a precursor to aldosterone.

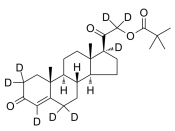


Purity: 99.57%
Clinical Data: Launched
Size: 10 mM × 1 mL, 100 mg

Desoxycorticosterone pivalate-d8

(DOCP-d8) Cat. No.: HY-107917S1

Desoxycorticosterone pivalate-d8 (DOCP-d8) is the deuterium labeled Desoxycorticosterone pivalate. Desoxycorticosterone pivalate (DOCP) is a mineralocorticoid hormone and an analog of Desoxycorticosterone.

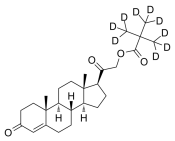


Purity: >98%
Clinical Data: No Development Reported
Size: 1 mg, 5 mg

Desoxycorticosterone pivalate-d9

(DOCP-d9) Cat. No.: HY-107917S

Desoxycorticosterone pivalate-d9 (DOCP-d9) is the deuterium labeled Desoxycorticosterone pivalate. Desoxycorticosterone pivalate (DOCP) is a mineralocorticoid hormone and an analog of Desoxycorticosterone.

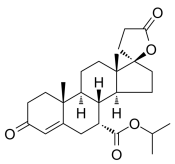


Purity: >98%
Clinical Data: No Development Reported
Size: 1 mg, 5 mg

Dicirenone

(SC26304) Cat. No.: HY-U00200

Dicirenone (SC26304) inhibits the effects of Aldosterone on urinary K^+:Na^+ ratios and the binding of [^{3}H]Aldosterone to renal cytoplasmic and nuclear receptors.

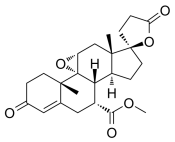


Purity: >98%
Clinical Data: No Development Reported
Size: 1 mg, 5 mg

Eplerenone

(Epoxymexrenone) Cat. No.: HY-B0251

Eplerenone (Epoxymexrenone) is a selective, competitive and oreally active **aldosterone** antagonist with an IC_{50} of 138 nM. Eplerenone has low affinity for progesterone, androgen, estrogen and glucocorticoid receptors.

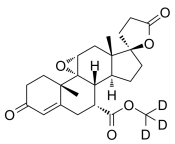


Purity: 99.68%
Clinical Data: Launched
Size: 10 mM × 1 mL, 10 mg, 50 mg, 100 mg

Eplerenone-d3

(Epoxymexrenone-d3) Cat. No.: HY-B0251S

Eplerenone-d3 (Epoxymexrenone-d3) is the deuterium labeled Eplerenone. Eplerenone (Epoxymexrenone) is a selective, competitive and oreally active **aldosterone** antagonist with an IC_{50} of 138 nM.

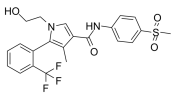


Purity: >98%
Clinical Data: No Development Reported
Size: 1 mg, 5 mg

Esaxerenone

(CS-3150; XL-550) Cat. No.: HY-100471

Esaxerenone (CS-3150) is a highly potent and selective non-steroidal **mineralocorticoid receptor** antagonist.

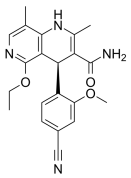


Purity: 99.88%
Clinical Data: Launched
Size: 10 mM × 1 mL, 1 mg, 5 mg, 10 mg, 50 mg, 100 mg

Finerenone

(BAY 94-8862) Cat. No.: HY-111372

Finerenone (BAY 94-8862) is a third-generation, selective, and orally available nonsteroidal **mineralocorticoid receptor (MR)** antagonist (IC_{50}=18 nM).

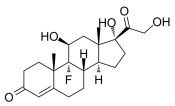


Purity: 99.95%
Clinical Data: Launched
Size: 5 mg, 10 mg, 25 mg, 50 mg, 100 mg

Fludrocortisone

(9α-Fludrocortisone; 9α-Fluorcortisol) Cat. No.: HY-B1203

Fludrocortisone, a synthetic mineralocorticoid with anti-inflammatory activity.

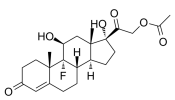


Purity: >98%
Clinical Data: Launched
Size: 1 mg, 5 mg

Fludrocortisone acetate

(9α-Fludrocortisone acetate; 9α-Fluorcortisol acetate) Cat. No.: HY-B1203A

Fludrocortisone acetate (9α-Fludrocortisone acetate) is a synthetic mineralocorticoid, used to control the amount of sodium and fluids in your body.

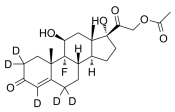


Purity: 99.45%
Clinical Data: Launched
Size: 10 mM × 1 mL, 100 mg

Fludrocortisone acetate-d5 (9α-Fludrocortisone acetate-d5; 9α-Fluorcortisol acetate-d5)

Cat. No.: HY-B1203AS

Fludrocortisone acetate-d5 is deuterium labeled Fludrocortisone acetate.

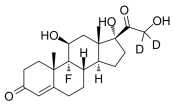


Purity: >98%
Clinical Data: No Development Reported
Size: 1 mg, 5 mg

Fludrocortisone-d2

(9α-Fludrocortisone-d2; 9α-Fluorcortisol-d2) Cat. No.: HY-B1203S1

Fludrocortisone-d2 is the deuterium labeled Fludrocortisone. Fludrocortisone, a synthetic mineralocorticoid with anti-inflammatory activity.

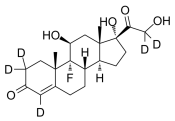


Purity: >98%
Clinical Data: No Development Reported
Size: 1 mg, 5 mg

Fludrocortisone-d5

(9α-Fludrocortisone-d5; 9α-Fluorcortisol-d5) Cat. No.: HY-B1203S

Fludrocortisone-d5 (9α-Fludrocortisone-d5) is the deuterium labeled Fludrocortisone. Fludrocortisone, a synthetic mineralocorticoid with anti-inflammatory activity.

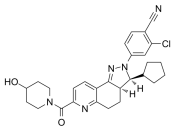


Purity: >98%
Clinical Data: No Development Reported
Size: 1 mg, 5 mg

Ocedurenone

Cat. No.: HY-132827

Ocedurenone is a **corticosteroid receptor** antagonist. Ocedurenone can be used for the research of kidney disease (WO2018054357, compound I).

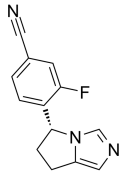


Purity: >98%
Clinical Data: No Development Reported
Size: 1 mg, 5 mg

Osilodrostat

(LCI699) Cat. No.: HY-16276

Osilodrostat (LCI699) is a potent inhibitor of human **11β-hydroxylase** and **aldosterone synthase** with **IC_{50}** values of 2.5 and 0.7 nM, respectively.

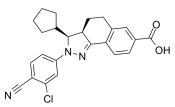


Purity: 99.90%
Clinical Data: Phase 3
Size: 10 mM × 1 mL, 2 mg, 5 mg, 10 mg, 25 mg, 50 mg, 100 mg

PF-3882845

Cat. No.: HY-12738

PF-3882845 is a remarkably high affinity selective and orally efficacious **mineralocorticoid receptor** (**MR** binding **IC_{50}**=2.7 nM) antagonist for hypertension and nephropathy. PF-3882845 also binds to **progesterone receptor** (**PR**) with the binding **IC_{50}** of 310 nM.

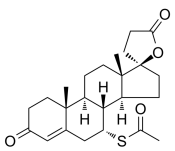


Purity: >98%
Clinical Data: No Development Reported
Size: 1 mg, 5 mg

Spironolactone

(SC9420) Cat. No.: HY-B0561

Spironolactone (SC9420) is an orally active **aldosterone mineralocorticoid receptor** antagonist with an **IC_{50}** of 24 nM. Spironolactone is also a potent antagonist of **androgen receptor** with an **IC_{50}** of 77 nM. Spironolactone promotes **autophagy** in podocytes.

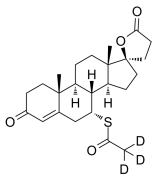


Purity: 99.75%
Clinical Data: Launched
Size: 10 mM × 1 mL, 100 mg, 1 g, 5 g

Spironolactone-d3

(SC9420-d3) Cat. No.: HY-B0561S1

Spironolactone-d3 (SC9420-d3) is the deuterium labeled Spironolactone. Spironolactone (SC9420) is an orally active **aldosterone mineralocorticoid receptor** antagonist with an **IC_{50}** of 24 nM.

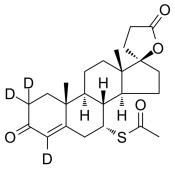


Purity: >98%
Clinical Data: No Development Reported
Size: 1 mg, 5 mg

Spironolactone-d3-1

(SC9420-d3-1) Cat. No.: HY-B0561S2

Spironolactone-d3-1 is deuterium labeled Spironolactone. Spironolactone (SC9420) is an orally active aldosterone mineralocorticoid receptor antagonist with an IC50 of 24 nM.

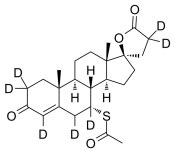


Purity: >98%
Clinical Data: No Development Reported
Size: 1 mg, 5 mg

Spironolactone-d7

(SC9420-d7) Cat. No.: HY-B0561S

Spironolactone-d7 (SC9420-d7) is the deuterium labeled Spironolactone. Spironolactone (SC9420) is an orally active **aldosterone mineralocorticoid receptor** antagonist with an **IC_{50}** of 24 nM.

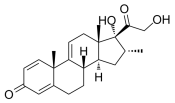


Purity: >98%
Clinical Data: No Development Reported
Size: 1 mg, 5 mg

Vamorolone

(VBP15) Cat. No.: HY-109017

Vamorolone (VBP15) is a first-in-class, orally active **dissociative steroidal anti-inflammatory** drug and membrane-stabilizer. Vamorolone improves muscular dystrophy without side effects. Vamorolone shows potent **NF-κB** inhibition and substantially reduces hormonal effects.



Purity: 99.12%
Clinical Data: Phase 2
Size: 10 mM × 1 mL, 5 mg, 10 mg, 50 mg