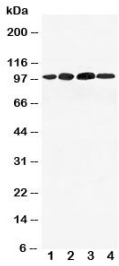
Mineralocorticoid Receptor Antibody / NR3C2 (R30672)

Catalog No.	Formulation	Size
R30672	0.5mg/ml if reconstituted with 0.2ml sterile DI water	100 ug

Bulk quote request

Availability	1-3 business days
Species Reactivity	Human, Mouse, Rat
Format	Antigen affinity purified
Host	Rabbit
Clonality	Polyclonal (rabbit origin)
Isotype	Rabbit IgG
Purity	Antigen affinity
Buffer	Lyophilized from 1X PBS with 2.5% BSA and 0.025% sodium azide/thimerosal
UniProt	P08235
Applications	Western Blot : 0.5-1ug/ml
Limitations	This Mineralocorticoid Receptor antibody is available for research use only.



Western blot testing of Mineralocorticoid Receptor antibody and Lane 1: 293T; 2: SMMC-7721; 3: SW620; 4: HeLa cell lysate. Expected molecular weight ~107/108/94 kDa (isoforms 1/3/4).

Description

Mineralocorticoid Receptor Antibody recognizes Mineralocorticoid receptor, also known as NR3C2, nuclear receptor subfamily 3 group C member 2, and Aldosterone receptor, a ligand-activated transcription factor belonging to the steroid hormone receptor family. The Mineralocorticoid receptor, frequently referred to as MR receptor or NR3C2 receptor in the literature, mediates the biological effects of mineralocorticoids such as aldosterone by regulating gene transcription in target cells. Mineralocorticoid Receptor Antibody is widely used in research settings and is commonly described as NR3C2 antibody or Aldosterone receptor antibody.

The Mineralocorticoid receptor is expressed in epithelial tissues involved in electrolyte and fluid homeostasis, including kidney distal tubules and collecting ducts, colon, salivary glands, and sweat glands. In these tissues, activation of the Aldosterone receptor regulates sodium reabsorption, potassium excretion, and overall salt balance. Beyond classical epithelial targets, NR3C2 is also expressed in cardiovascular tissue, adipose tissue, and specific regions of the central nervous system, where MR signaling contributes to blood pressure regulation, inflammatory responses, metabolic processes, and stress adaptation.

Altered Mineralocorticoid receptor signaling has been implicated in hypertension, cardiovascular remodeling, renal disease, and metabolic disorders. Dysregulation of MR receptor activity or NR3C2 expression may contribute to fibrosis, inflammation, and tissue remodeling in heart and kidney. As a result, Mineralocorticoid Receptor Antibody staining patterns are frequently evaluated in studies investigating endocrine regulation, cardiovascular biology, renal physiology, and hormone-driven disease mechanisms.

At the cellular level, the Mineralocorticoid receptor resides primarily in the cytoplasm in its inactive state and translocates to the nucleus upon ligand binding to regulate transcription of target genes. Its function as a steroid hormone receptor and transcription factor makes Mineralocorticoid Receptor Antibody a valuable tool for studying aldosterone signaling pathways, nuclear receptor biology, and hormone-dependent gene regulation in normal and diseased tissues.

Application Notes

The stated application concentrations are suggested starting amounts. Titration of the Mineralocorticoid Receptor antibody may be required due to differences in protocols and secondary/substrate sensitivity.

Immunogen

Amino acids 966-984 (DQLPKVESGNAKPLYFHRK-human) were used as the immunogen for this Mineralocorticoid Receptor antibody (100% homologous in human, mouse and rat). This sequence is common to isoforms 1, 3 and 4.

Storage

After reconstitution, the Mineralocorticoid Receptor antibody can be stored for up to one month at 4oC. For long-term, aliquot and store at -20oC. Avoid repeated freezing and thawing.