

Anti-NR3C2 Antibody

Catalog # ABO10908

Specification

Anti-NR3C2 Antibody - Product Information

ApplicationWBPrimary AccessionP08235HostRabbitReactivityHuman, Mouse, RatClonalityPolyclonalFormatLyophilizedDescriptionRabbit IgG polyclonal antibody for Mineralocorticoid receptor(NR3C2) detection. Tested with WB inHuman;Mouse;Rat.

Reconstitution Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

Anti-NR3C2 Antibody - Additional Information

Gene ID 4306

Other Names Mineralocorticoid receptor, MR, Nuclear receptor subfamily 3 group C member 2, NR3C2, MCR, MLR

Calculated MW 107067 MW KDa

Application Details Western blot, 0.1-0.5 μg/ml, Human, Mouse, Rat

Subcellular Localization

Cytoplasm. Nucleus. Endoplasmic reticulum membrane; Peripheral membrane protein. Cytoplasmic and nuclear in the absence of ligand; nuclear after ligand-binding. When bound to HSD11B2, it is found associated with the endoplasmic reticulum membrane.

Tissue Specificity

Ubiquitous. Highly expressed in distal tubules, convoluted tubules and cortical collecting duct in kidney, and in sweat glands. Detected at lower levels in cardiomyocytes, in epidermis and in colon enterocytes.

Protein Name Mineralocorticoid receptor(MR)

Contents Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na2HPO4, 0.05mg Thimerosal, 0.05mg NaN3.

Immunogen



A synthetic peptide corresponding to a sequence at the C-terminus of human NR3C2 (966-984aa DQLPKVESGNAKPLYFHRK), identical to the related mouse and rat sequences.

Purification Immunogen affinity purified.

Cross Reactivity No cross reactivity with other proteins

Storage

At -20°C for one year. After r°Constitution, at 4°C for one month. It°Can also be aliquotted and stored frozen at -20°C for a longer time.Avoid repeated freezing and thawing.

Sequence Similarities Belongs to the nuclear hormone receptor family. NR3 subfamily.

Anti-NR3C2 Antibody - Protein Information

Name NR3C2

Synonyms MCR, MLR

Function

Receptor for both mineralocorticoids (MC) such as aldosterone and glucocorticoids (GC) such as corticosterone or cortisol. Binds to mineralocorticoid response elements (MRE) and transactivates target genes. The effect of MC is to increase ion and water transport and thus raise extracellular fluid volume and blood pressure and lower potassium levels.

Cellular Location

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Tissue Location

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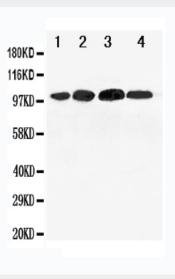
Anti-NR3C2 Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

Anti-NR3C2 Antibody - Images





Anti-NR3C2 antibody, ABO10908, Western blottingLane 1: 293T Cell LysateLane 2: SMMC Cell LysateLane 3: SW620 Cell LysateLane 4: HELA Cell Lysate

Anti-NR3C2 Antibody - Background

NR3C2 (nuclear receptor subfamily 3, group C, member 2), also known as MR (mineralocorticoid receptor), is a protein that in humans is encoded by the NR3C2 gene that is located on chromosome 4q31.1-31.2. It belongs to the nuclear receptor family where the ligand diffuses into cells, interacts with the receptor and results in a signal transduction affecting specific gene expression in the nucleus. This gene encodes the mineralocorticoid receptor, which mediates aldosterone actions on salt and water balance within restricted target cells. The protein functions as a ligand-dependent transcription factor that binds to mineralocorticoid response elements in order to transactivate target genes. Mutations in this gene cause autosomal dominant pseudohypoaldosteronism type I, a disorder characterized by urinary salt wasting. Defects in this gene are also associated with early onset hypertension with severe exacerbation in pregnancy. Alternative splicing results in multiple transcript variants.