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Anti-NR3C2 Picoband Antibody

Catalog # ABO12451

Specification

Anti-NR3C2 Picoband Antibody - Product Information

Application	**WB**
Primary Accession	P08235
Host	**Rabbit**
Reactivity	**Human, Mouse, Rat**
Clonality	**Polyclonal**
Format	**Lyophilized**

Description
Rabbit IgG polyclonal antibody for Mineralocorticoid receptor(NR3C2) detection. Tested with WB in Human;Mouse;Rat.

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

Anti-NR3C2 Picoband 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

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

Immunogen

A synthetic peptide corresponding to a sequence at the C-terminus of human NR3C2 (950-984aa HALKVEFPAMLVEIISDQLPKVESGNAKPLYFHRK), different from the related mouse sequence by one amino acid, and from the related rat sequence by two amino acids.

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.**

Anti-NR3C2 Picoband 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
Cytoplasm. Nucleus. Endoplasmic reticulum membrane; Peripheral membrane protein. Note=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 Location
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.

Anti-NR3C2 Picoband Antibody - Protocols

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

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

Anti-NR3C2 Picoband Antibody - Images

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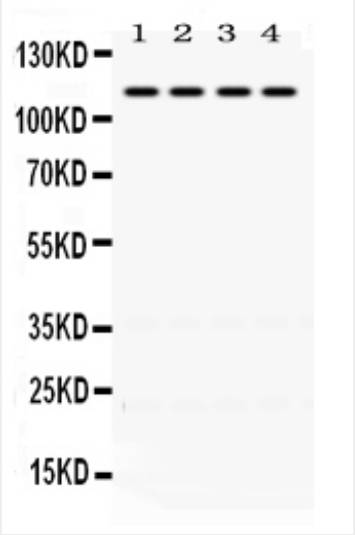

Figure 1. Western blot analysis of NR3C2 using anti-NR3C2 antibody (ABO12451). Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel) / 90V (Resolving gel) for 2-3 hours. The sample well of each lane was loaded with 50ug of sample under reducing conditions. Lane 1: Rat Kidney Tissue Lysate,Lane 2: Mouse Kidney Tissue Lysate,Lane 3: HELA Whole Cell Lysate,Lane 4: A431 Whole Cell Lysate. After Electrophoresis, proteins were transferred to a Nitrocellulose membrane at 150mA for 50-90 minutes. Blocked the membrane with 5% Non-fat Milk/ TBS for 1.5 hour at RT. The membrane was incubated with rabbit anti-NR3C2 antigen affinity purified polyclonal antibody (Catalog # ABO12451) at 0.5 Î¼g/mL overnight at 4Â°C, then washed with TBS-0.1%Tween 3 times with 5 minutes each and probed with a goat anti-rabbit IgG-HRP secondary antibody at a dilution of 1:10000 for 1.5 hour at RT. The signal is developed using an Enhanced Chemiluminescent detection (ECL) kit with Tanon 5200 system. A specific band was detected for NR3C2 at approximately 110KD. The expected band size for NR3C2 is at 110KD.

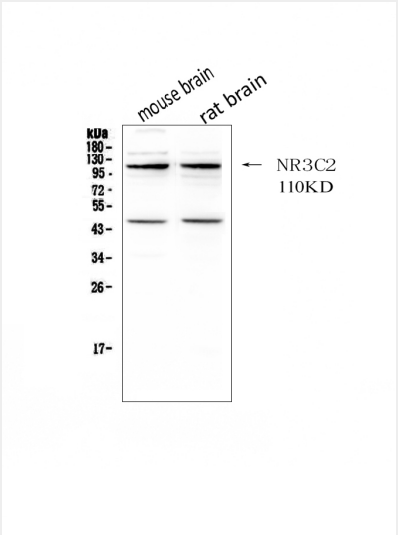

Figure 2. Western blot analysis of NR3C2 using anti- NR3C2 antibody (ABO12451). Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel) / 90V (Resolving gel) for 2-3 hours. The sample well of each lane was loaded with 50ug of sample under reducing conditions. Lane 1: mouse brain tissue lysates, Lane 2: rat brain tissue lysates. After Electrophoresis, proteins were transferred to a Nitrocellulose membrane at 150mA for 50-90 minutes. Blocked the membrane with 5% Non-fat Milk/ TBS for 1.5 hour at RT. The membrane was incubated with rabbit anti- NR3C2 antigen affinity purified polyclonal antibody (Catalog # ABO12451) at 0.5 Î¼g/mL overnight at 4Â°C, then washed with TBS-0.1%Tween 3 times with 5 minutes each and probed with a goat anti-rabbit IgG-HRP secondary antibody at a dilution of

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Anti-NR3C2 Picoband 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.