10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

Anti-NR3C1 Picoband Antibody

Catalog # ABO11923

Specification

Anti-NR3C1 Picoband Antibody - Product Information

Application	**WB, IHC**
Primary Accession	P04150
Host	**Rabbit**
Reactivity	**Human, Rat**
Clonality	**Polyclonal**
Format	**Lyophilized**

Description
Rabbit IgG polyclonal antibody for Glucocorticoid receptor(NR3C1) detection. Tested with WB, IHC-P in Human;Rat.

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

Anti-NR3C1 Picoband Antibody - Additional Information

Gene ID 2908

Other Names
Glucocorticoid receptor, GR, Nuclear receptor subfamily 3 group C member 1, NR3C1, GRL

Calculated MW
85659 MW KDa

Application Details
Immunohistochemistry(Paraffin-embedded Section), 0.5-1 µg/ml, Human, Rat, By Heat
Western blot, 0.1-0.5 µg/ml, Human

Subcellular Localization
Cytoplasm . Mitochondrion. Nucleus . Cytoplasmic in the absence of ligand, nuclear after ligand-binding.

Tissue Specificity
Widely expressed. In the heart, detected in left and right atria, left and right ventricles, aorta, apex, intraventricular septum, and atrioventricular node as well as whole adult and fetal heart. .

Protein Name
Glucocorticoid receptor

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

Immunogen
E.coli-derived human NR3C1 recombinant protein (Position: M1-D373). Human NR3C1 shares 85% and 82% amino acid (aa) sequences identity with mouse and rat NR3C1, respectively.

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-NR3C1 Picoband Antibody - Protein Information

Name NR3C1 (HGNC:7978)

Synonyms GRL

Function
Receptor for glucocorticoids (GC) (PubMed:27120390, PubMed:37478846). Has a dual mode of action: as a transcription factor that binds to glucocorticoid response elements (GRE), both for nuclear and mitochondrial DNA, and as a modulator of other transcription factors (PubMed:28139699). Affects inflammatory responses, cellular proliferation and differentiation in target tissues. Involved in chromatin remodeling (PubMed:9590696). Plays a role in rapid mRNA degradation by binding to the 5' UTR of target mRNAs and interacting with PNRC2 in a ligand-dependent manner which recruits the RNA helicase UPF1 and the mRNA-decapping enzyme DCP1A, leading to RNA decay (PubMed:25775514). Could act as a coactivator for STAT5-dependent transcription upon growth hormone (GH) stimulation and could reveal an essential role of hepatic GR in the control of body growth (By similarity).

Cellular Location
[Isoform Alpha]: Cytoplasm. Nucleus. Mitochondrion. Cytoplasm, cytoskeleton, spindle. Cytoplasm, cytoskeleton, microtubule organizing center, centrosome. Chromosome {ECO:0000250|UniProtKB:P06537}. Nucleus, nucleoplasm {ECO:0000250|UniProtKB:P06537}. Note=After ligand activation, translocates from the cytoplasm to the nucleus (PubMed:30698747). The hormone-occupied receptor undergoes rapid exchange between chromatin and the nucleoplasmic compartment (By similarity). In the presence of NR1D1 shows a time-dependent subcellular localization, localizing to the cytoplasm at ZT8 and to the nucleus at ZT20 (By similarity). Lacks this diurnal pattern of localization in the absence of NR1D1, localizing to both nucleus and the cytoplasm at ZT8 and ZT20 (By similarity). Upon dexamethasone binding associates with the glucocorticoid response elements of target genes (By similarity) {ECO:0000250|UniProtKB:P06537, ECO:0000269|PubMed:30698747} [Isoform Alpha-B]: Nucleus. Cytoplasm Note=After ligand activation, translocates from the cytoplasm to the nucleus.

Tissue Location
Widely expressed including bone, stomach, lung, liver, colon, breast, ovary, pancreas and kidney (PubMed:25847991). In the heart, detected in left and right atria, left and right ventricles, aorta, apex, intraventricular septum, and atrioventricular node as well as whole adult and fetal heart (PubMed:10902803) [Isoform Alpha-2]: Widely expressed.

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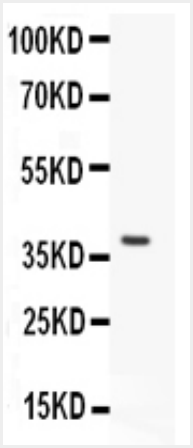
Anti-NR3C1 Picoband Antibody - Protocols

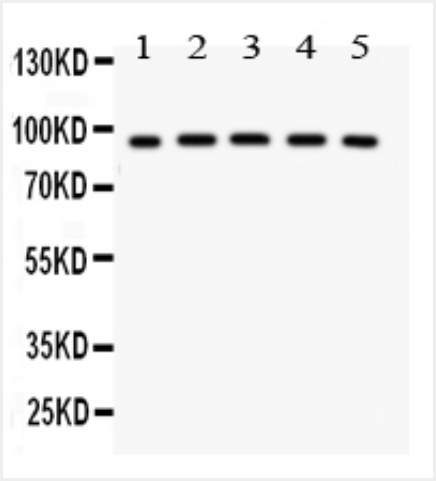
Provided below are standard protocols that you may find useful for product applications.

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

Anti-NR3C1 Picoband Antibody - Images



Anti- NR3C1 antibody, ABO11923, Western blottingAll lanes: Anti NR3C1 (ABO11923) at 0.5ug/mlWB: Recombinant Human NR3C1 Protein 0.5ngPredicted bind size: 38KDObserved bind size: 38KD



Anti- NR3C1 antibody, ABO11923, Western blottingAll lanes: Anti NR3C1 (ABO11923) at 0.5ug/mlLane 1: HELA Whole Cell Lysate at 40ugLane 2: MCF-7 Whole Cell Lysate at 40ugLane 3: COLO320 Whole Cell Lysate at 40ugLane 4: MM231 Whole Cell Lysate at 40ugLane 5: HEPG2 Whole Cell Lysate at 40ugPredicted bind size: 90KDObserved bind size: 90KD

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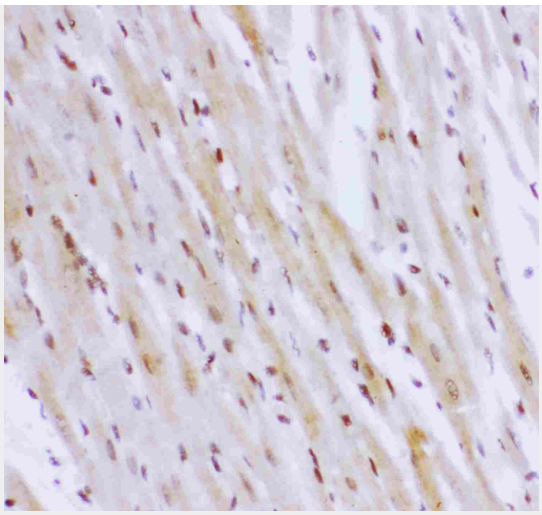
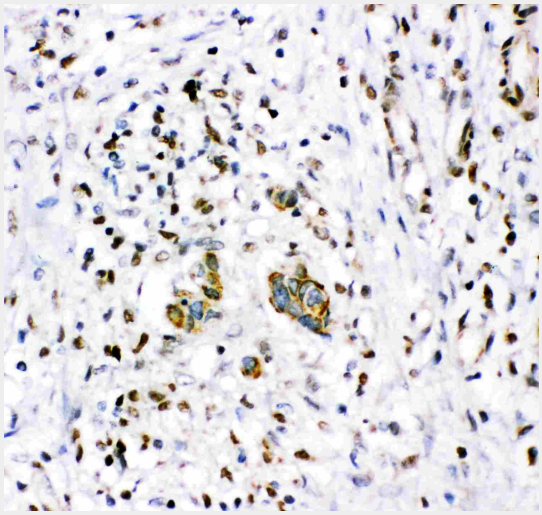


Anti- NR3C1 antibody, ABO11923,IHC(P)IHC(P): Rat Cardiac Muscle Tissue



Anti- NR3C1 antibody, ABO11923,IHC(P)IHC(P): Human Mammary Cancer Tissue

Anti-NR3C1 Picoband Antibody - Background

The glucocorticoid receptor (GR, or GCR), also known as NR3C1, is the receptor to which cortisol and other glucocorticoids bind. In humans, the GR protein is encoded by NR3C1 gene which is located on chromosome 5 (5q31). GR is expressed in almost every cell in the body and regulates genes controlling the development, metabolism, and immune response. Because the receptor gene is expressed in several forms, it has many different (pleiotropic) effects in different parts of the body. The activated GR complex up-regulates the expression of anti-inflammatory proteins in the nucleus or represses the expression of pro-inflammatory proteins in the cytosol (by preventing the translocation of other transcription factors from the cytosol into the nucleus).