

**Anti-NR3C1 Picoband Antibody**  
**Catalog # ABO12033****Specification**

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**Anti-NR3C1 Picoband Antibody - Product Information**

Application	WB, IHC-P
Primary Accession	<a href="#">P04150</a>
Host	Rabbit
Reactivity	Human, Mouse, Rat
Clonality	Polyclonal
Format	Lyophilized

**Description**

Rabbit IgG polyclonal antibody for Glucocorticoid receptor(NR3C1) detection. Tested with WB, IHC-P in Human;Mouse;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, Mouse, Rat, By Heat<br>Western blot, 0.1-0.5 µg/ml, Human, Mouse, Rat<br>

**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 Na<sub>2</sub>HPO<sub>4</sub>, 0.05mg NaN<sub>3</sub>.

**Immunogen**

E.coli-derived human NR3C1 recombinant protein (Position: A20-F199). Human NR3C1 shares 80% and 74% amino acid (aa) sequence 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 reconstitution, 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](http://www.uniprot.org/citations/27120390), PubMed: [37478846](http://www.uniprot.org/citations/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](http://www.uniprot.org/citations/28139699)). Affects inflammatory responses, cellular proliferation and differentiation in target tissues. Involved in chromatin remodeling (PubMed: [9590696](http://www.uniprot.org/citations/9590696)). Plays a role in rapid mRNA degradation by binding to the 5' UTR of target mRNAs and interacting with PNR2 in a ligand-dependent manner which recruits the RNA helicase UPF1 and the mRNA-decapping enzyme DCP1A, leading to RNA decay (PubMed: [25775514](http://www.uniprot.org/citations/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**

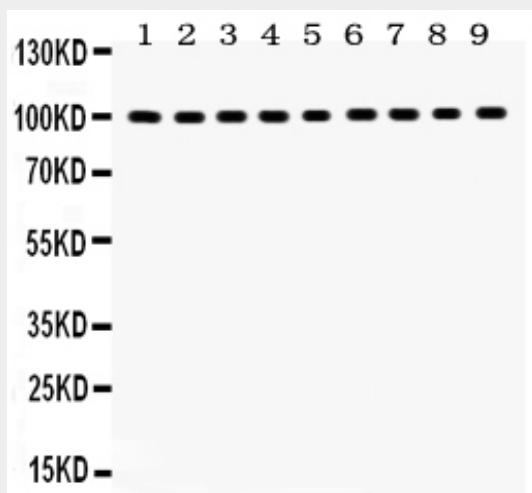
Widely expressed including bone, stomach, lung, liver, colon, breast, ovary, pancreas and kidney (PubMed:25847991). In the heart, detected in left and right atria, left and right ventricles, aorta, apex, intraventricular septum, and atrioventricular node as well as whole adult and fetal heart (PubMed:10902803)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

## Anti-NR3C1 Picoband Antibody - Protocols

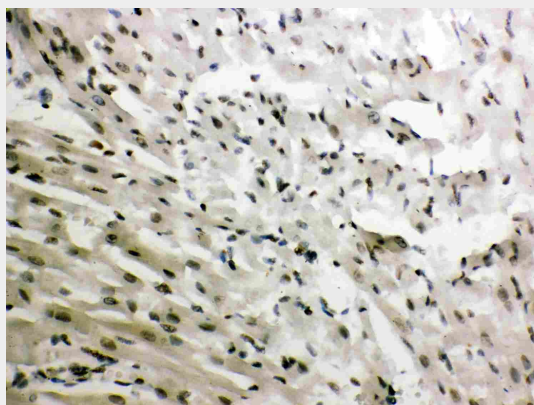
Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

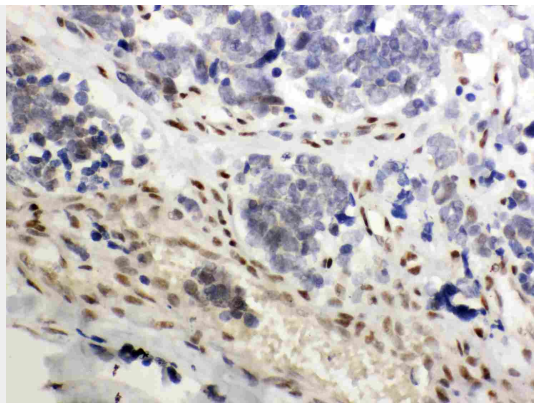
## Anti-NR3C1 Picoband Antibody - Images



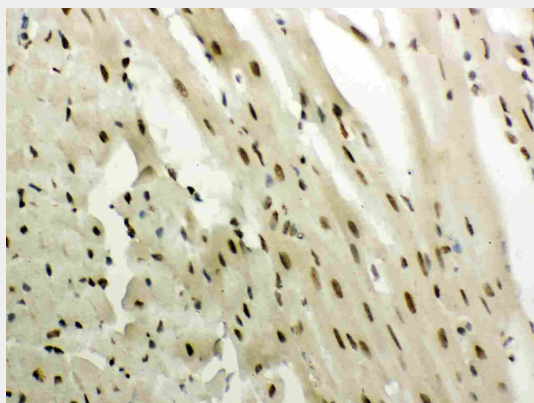
Anti- NR3C1 Picoband antibody, ABO12033, Western blotting  
All lanes: Anti NR3C1 (ABO12033) at 0.5ug/ml  
Lane 1: Rat Liver Tissue Lysate at 50ug  
Lane 2: Rat Brain Tissue Lysate at 50ug  
Lane 3: Rat Spleen Tissue Lysate at 50ug  
Lane 4: Human Placenta Tissue Lysate at 50ug  
Lane 5: SMMC Whole Cell Lysate at 40ug  
Lane 6: HEPA Whole Cell Lysate at 40ug  
Lane 7: NEURO Whole Cell Lysate at 40ug  
Lane 8: HELA Whole Cell Lysate at 40ug  
Lane 9: PC-12 Whole Cell Lysate at 40ug  
Predicted bind size: 86KD  
Observed bind size: 100KD



Anti- NR3C1 Picoband antibody, ABO12033, IHC(P)  
IHC(P): Rat Cardiac Muscle Tissue



Anti- NR3C1 Picoband antibody, ABO12033, IHC(P)IHC(P): Human Lung Cancer Tissue



Anti- NR3C1 Picoband antibody, ABO12033, IHC(P)IHC(P): Mouse Cardiac Muscle 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).