

Anti-Glucocorticoid Receptor/NR3C1 Antibody Picoband™

Catalog Number: PB9342

About NR3C1

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).

Overview

Product Name	Anti-Glucocorticoid Receptor/NR3C1 Antibody Picoband™
Reactive Species	Human, Mouse, Rat
Description	Boster Bio Anti-Glucocorticoid Receptor/NR3C1 Antibody Picoband™ catalog # PB9342. Tested in IHC, WB applications. This antibody reacts with Human, Mouse, Rat.
Application	IHC, WB
Clonality	Polyclonal
Formulation	Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na ₂ HPO ₄ , 0.05mg NaN ₃ .
Storage Instructions	Store at -20°C for one year from date of receipt. After reconstitution, at 4°C for one month. It can also be aliquotted and stored frozen at -20°C for six months. Avoid repeated freeze-thaw cycles.
Host	Rabbit
Uniprot ID	P04150

Technical Details

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.
Predicted Reactive Species	Bovine
Recommended Detection Systems	Boster recommends Enhanced Chemiluminescent Kit with anti-Rabbit IgG (EK1002) for Western blot, and HRP Conjugated anti-Rabbit IgG Super Vision Assay Kit (SV0002-1) for IHC(P).
Cross Reactivity	No cross-reactivity with other proteins
Isotype	Rabbit IgG
Form	Lyophilized

Concentration	Adding 0.2 ml of distilled water will yield a concentration of 500 ug/ml.
Purification	Immunogen affinity purified.
Suggested Dilutions	Dilute the sample so that the expected range of concentrations fall within the detection range of this kit. If the expected range of concentration is unknown, a pilot test should be conducted to decide the optimal dilution ratio for your samples. Some PubMed article(s) citing the expression level of this target are as follows: Boster Bio's internal QC testing used: Immunohistochemistry (Paraffin-embedded Section), 0.5-1ug/ml, Human, Mouse, Rat, By Heat Western blot, 0.1-0.5ug/ml, Human, Mouse, Rat

Anti-Glucocorticoid Receptor/NR3C1 Antibody Picoband™ (PB9342) Images

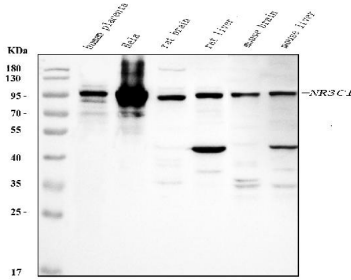


Figure 1. Western blot analysis of NR3C1 using anti-NR3C1 antibody (PB9342).

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 30 ug of sample under reducing conditions.

Lane 1: human placenta tissue lysates,

Lane 2: human Hela whole cell lysates,

Lane 3: rat brain tissue lysates,

Lane 4: rat liver tissue lysates,

Lane 5: mouse brain tissue lysates,

Lane 6: mouse liver tissue lysates.

After electrophoresis, proteins were transferred to a nitrocellulose membrane at 150 mA 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-

NR3C1 antigen affinity purified polyclonal antibody (Catalog

PB9342) at 0.5 ug/mL overnight at 4°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 1:5000 for 1.5 hour at RT. The signal is developed

using an Enhanced Chemiluminescent detection (ECL) kit

(Catalog # EK1002) with Tanon 5200 system. A specific

band was detected for NR3C1 at approximately 100 kDa.

The expected band size for NR3C1 is at 86 kDa.

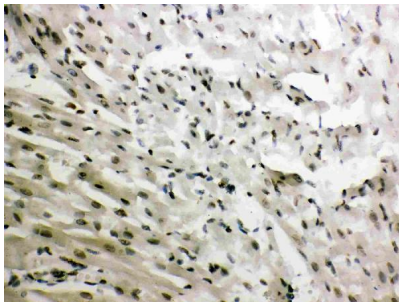


Figure 2. IHC analysis of NR3C1 using anti-NR3C1 antibody (PB9342).

NR3C1 was detected in a paraffin-embedded section of rat cardiac muscle tissue. Heat mediated antigen retrieval was

performed in EDTA buffer (pH 8.0, epitope retrieval

solution). The tissue section was blocked with 10% goat

serum. The tissue section was then incubated with 1 ug/ml

rabbit anti-NR3C1 Antibody (PB9342) overnight at 4°C.

Biotinylated goat anti-rabbit IgG was used as secondary

antibody and incubated for 30 minutes at 37°C. The tissue

section was developed using Streptavidin-Biotin-Complex

(SABC) (Catalog # SA1022) with DAB as the chromogen.

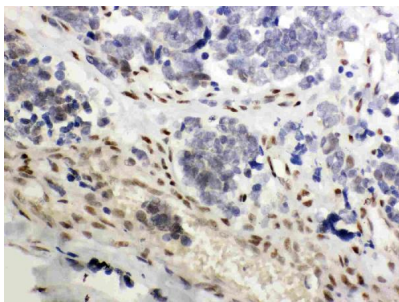


Figure 3. IHC analysis of NR3C1 using anti-NR3C1 antibody (PB9342).

NR3C1 was detected in a paraffin-embedded section of

human lung cancer tissue. Heat mediated antigen retrieval

was performed in EDTA buffer (pH 8.0, epitope retrieval

solution). The tissue section was blocked with 10% goat

serum. The tissue section was then incubated with 1 ug/ml

rabbit anti-NR3C1 Antibody (PB9342) overnight at 4°C.

Biotinylated goat anti-rabbit IgG was used as secondary

antibody and incubated for 30 minutes at 37°C. The tissue

section was developed using Streptavidin-Biotin-Complex

(SABC) (Catalog # SA1022) with DAB as the chromogen.

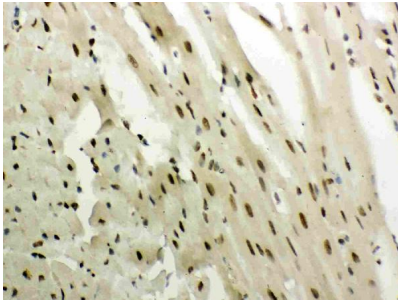


Figure 4. IHC analysis of NR3C1 using anti-NR3C1 antibody (PB9342).

NR3C1 was detected in a paraffin-embedded section of mouse cardiac muscle tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH 8.0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 1 ug/ml rabbit anti-NR3C1 Antibody (PB9342) overnight at 4°C. Biotinylated goat anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37°C. The tissue section was developed using Streptavidin-Biotin-Complex (SABC) (Catalog # SA1022) with DAB as the chromogen.

2 Publications Citing This Product

1. PubMed ID: 10.1007/s10072-011-0597-1, Expression of locus coeruleus mineralocorticoid receptor and glucocorticoid receptor in rats under single-prolonged stress

2. PubMed ID: -, Lifan Ma, Xiaozhen Tan, Jiaqi Li, Yang Long, Zhen Xiao, Ji De, Yan Ren, Haoming Tian, T.a.o. Chen, A Novel Glucocorticoid Receptor Mutation in Primary Generalized Glucocorticoid Resistance Disease, Endocrine Practice, Volume 26, Issue 6, 2020, 651-659, ISSN 1530-891X,

Visit bosterbio.com/anti-nr3c1-picoband-trade-antibody-pb9342-boster.html to see all 2 publications.

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