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antibody and ELISA experts

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Anti-PGRMC1 Antibody Picoband™

Catalog Number: PB9775

About PGRMC1

Progesterone receptor membrane component 1 (PGRMC1) is a protein which co-purifies with progesterone binding proteins in the liver and ovary. In humans, the PGRMC1 protein is encoded by the PGRMC1 gene. The Sigma-2 receptor was recently identified as potentially being the same as PGRMC1. The sole biochemical function of PGRMC1 is heme-binding. PGRMC1 shares key structural motifs with cytochrome b5. It binds and activates P450 proteins, which are important in drug, hormone and lipid metabolism. Also, PGRMC1 binds to PAIR-BP1 (plasminogen activator inhibitor RNA-binding protein-1). However, its expression outside of the reproductive tract and in males suggests multiple functions for the protein. These may include binding to Insig (insulin-induced gene), which regulates cholesterol synthesis.

Overview

Product Name	Anti-PGRMC1 Antibody Picoband™
Reactive Species	Human, Mouse, Rat
Description	Boster Bio Anti-PGRMC1 Antibody Picoband™ catalog # PB9775. Tested in IHC, WB applications. This antibody reacts with Human, Mouse, Rat.
Application	IHC, WB
Clonality	Polyclonal
Formulation	Each vial contains 4mg Trehalose, 0.9mg NaCl, 0.2mg Na2HPO4, 0.05mg NaN3.
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	O00264

Technical Details

Immunogen	A synthetic peptide corresponding to a sequence in the middle region of human PGRMC1, identical to the related mouse sequence, and different from the related rat sequence by two amino acids.
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

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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

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Anti-PGRMC1 Antibody Picoband™ (PB9775) Images

Figure 1. Western blot analysis of PGRMC1 using anti-PGRMC1 antibody (PB9775).
Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel) / 90V (Resolving gel) for 2-3 hours.
Lane 1: Rat Liver Tissue Lysate at 50ug,
Lane 2: Rat Kidney Tissue Lysate at 50ug,
Lane 3: Mouse Liver Tissue Lysate at 50ug,
Lane 4: Mouse Kidney Tissue Lysate at 50ug,
Lane 5: SMMC Whole Cell Lysate at 40ug.
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-PGRMC1 antigen affinity purified polyclonal antibody (Catalog # PB9775) 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 PGRMC1 at approximately 26 kDa. The expected band size for PGRMC1 is at 26 kDa.

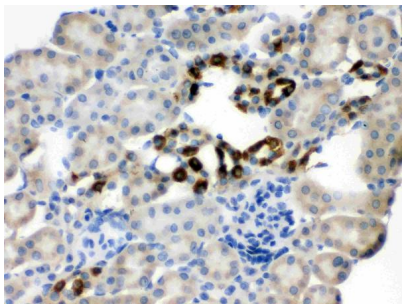

Figure 2. IHC analysis of PGRMC1 using anti-PGRMC1 antibody (PB9775).
PGRMC1 was detected in a paraffin-embedded section of mouse kidney tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH 8.0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 1 ug/ml rabbit anti-PGRMC1 Antibody (PB9775) 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 Strepavidin-Biotin-Complex (SABC) (Catalog # SA1022) with DAB as the chromogen.

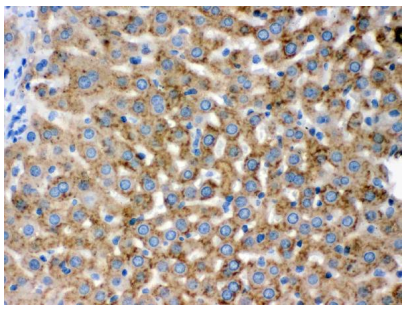

Figure 3. IHC analysis of PGRMC1 using anti-PGRMC1 antibody (PB9775).
PGRMC1 was detected in a paraffin-embedded section of rat liver tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH 8.0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 1 ug/ml rabbit anti-PGRMC1 Antibody (PB9775) 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 Strepavidin-Biotin-Complex (SABC) (Catalog # SA1022) with DAB as the chromogen.

Figure 4. IHC analysis of PGRMC1 using anti-PGRMC1 antibody (PB9775).

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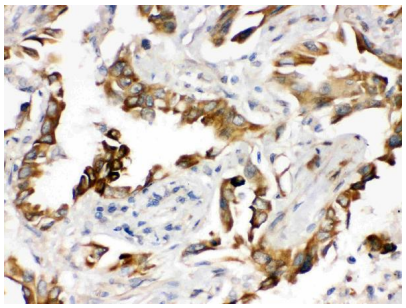

PGRMC1 was detected in a paraffin-embedded section of human lung cancer tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH 8.0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 1 ug/ml rabbit anti-PGRMC1 Antibody (PB9775) 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 Strepavidin-Biotin-Complex (SABC) (Catalog # SA1022) with DAB as the chromogen.

Anti-PGRMC1 Antibody ™