

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

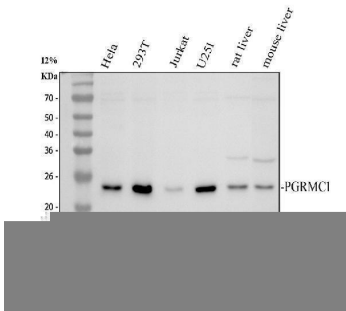
Product Name	Anti-PGRMC1 Antibody Picoband®
Reactive Species	Human, Mouse, Rat
Description	Boster Bio Anti-PGRMC1 Antibody Picoband® catalog # PB9775. Tested in IF, IHC, WB applications. This antibody reacts with Human, Mouse, Rat. The brand Picoband indicates this is a premium antibody that guarantees superior quality, high affinity, and strong signals with minimal background in Western blot applications. Only our best-performing antibodies are designated as Picoband, ensuring unmatched performance.
Application	IF, IHC, WB
Clonality	Polyclonal
Formulation	Each vial contains 4 mg Trehalose, 0.9 mg NaCl and 0.2 mg Na ₂ HPO ₄ .
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

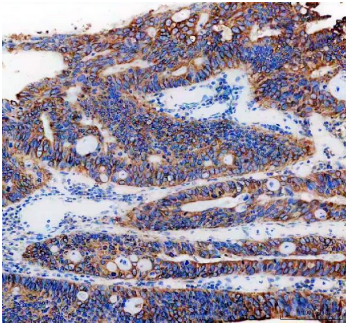
Immunogen	A synthetic peptide corresponding to a sequence in the middle region of human PGRMC1, identical to the related mouse sequence, and different from the related rat sequence by two amino acids.
Recommended Detection Systems	Boster recommends Enhanced Chemiluminescent Kit with anti-Rabbit IgG (EK1002) 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	Western blot, 0.1-0.5ug/ml, Human, Mouse, Rat Immunohistochemistry (Paraffin-embedded Section), 2-5ug/ml, Human Immunofluorescence, 5 ug/ml, Human

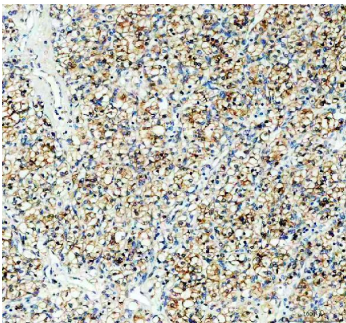
Anti-PGRMC1 Antibody Picoband® (PB9775) Images



Western blot analysis of PGRMC1 using anti-PGRMC1 antibody (PB9775). Electrophoresis was performed on a 12% SDS-PAGE gel at 80V (Stacking gel) / 120V (Resolving gel) for 2 hours. The sample well of each lane was loaded with 30 ug of sample under reducing conditions. Lane 1: human HeLa whole cell lysates, Lane 2: human 293T whole cell lysates, Lane 3: human Jurkat whole cell lysates, Lane 4: human U251 whole cell lysates, Lane 5: rat liver 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-PGRMC1 antigen affinity purified polyclonal antibody (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 (Catalog # BA1054) at a dilution of 1:5000 for 1.5 hour at RT. The signal is developed using an ECL Plus Western Blotting Substrate (Catalog # AR1196-200) with Tanon 5200 system. A specific band was detected for PGRMC1 at approximately 22 kDa. The expected band size for PGRMC1 is at 22 kDa.

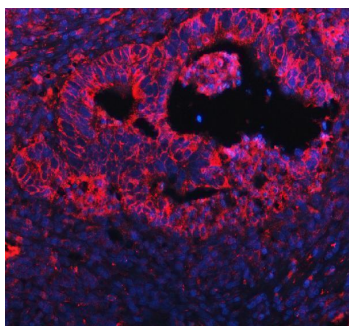


IHC analysis of PGRMC1 using anti-PGRMC1 antibody (PB9775). PGRMC1 was detected in a paraffin-embedded section of human colon cancer tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH 8.0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 2 ug/ml rabbit anti-PGRMC1 Antibody (PB9775) overnight at 4°C. Peroxidase Conjugated Goat Anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37°C. The tissue section was developed using HRP Conjugated Rabbit IgG Super Vision Assay Kit (Catalog # SV0002) with DAB as the chromogen.



IHC analysis of PGRMC1 using anti-PGRMC1 antibody (PB9775). PGRMC1 was detected in a paraffin-embedded section of human renal 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 2 ug/ml rabbit anti-PGRMC1 Antibody (PB9775) overnight at 4°C. Peroxidase Conjugated Goat Anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37°C. The tissue section was developed using HRP Conjugated Rabbit IgG Super Vision Assay Kit (Catalog # SV0002) with DAB as the chromogen.

IF analysis of PGRMC1 using anti-PGRMC1 antibody (PB9775). PGRMC1 was detected in a paraffin-embedded section of human intestine 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 5 μ g/mL rabbit anti-PGRMC1 Antibody (PB9775) overnight at 4°C. Cy Conjugated Goat Anti-Rabbit IgG (BA1032) was used as secondary antibody at 1:500 dilution and incubated for 30 minutes at 37°C. The section was counterstained with DAPI. Visualize using a fluorescence microscope and filter sets appropriate for the label used.

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Anti-PGRMC1 Antibody

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