

Anti-PGRMC1 Picoband Antibody
Catalog # ABO12461**Specification**

Anti-PGRMC1 Picoband Antibody - Product Information

Application	WB, IHC-P
Primary Accession	O00264
Host	Rabbit
Reactivity	Human, Mouse, Rat
Clonality	Polyclonal
Format	Lyophilized

Description

Rabbit IgG polyclonal antibody for Membrane-associated progesterone receptor component 1(PGRMC1) 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-PGRMC1 Picoband Antibody - Additional Information

Gene ID 10857

Other Names

Membrane-associated progesterone receptor component 1, mPR, PGRMC1, HPR6.6, PGRMC

Calculated MW

21671 MW KDa

Application Details

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

Subcellular Localization

Microsome membrane ; Single- pass membrane protein . Endoplasmic reticulum membrane ; Single-pass membrane protein .

Tissue Specificity

Widely expressed, with highest expression in liver and kidney.

Protein Name

Membrane-associated progesterone receptor component 1

Contents

Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na₂HPO₄, 0.05mg Na₃.

Immunogen

A synthetic peptide corresponding to a sequence in the middle region of human PGRMC1 (67-102aa RLKRRDFTPAELRRFDGVQDPRILMAINGKVFDVTK), identical to the related mouse sequence, and different from the related rat sequence by two amino acids.

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.

Anti-PGRMC1 Picoband Antibody - Protein Information

Name PGRMC1 ([HGNC:16090](#))

Function

Component of a progesterone-binding protein complex (PubMed:[28396637](http://www.uniprot.org/citations/28396637)). Binds progesterone (PubMed:[25675345](http://www.uniprot.org/citations/25675345)). Has many reported cellular functions (heme homeostasis, interaction with CYPs). Required for the maintenance of uterine histoarchitecture and normal female reproductive lifespan (By similarity). Intracellular heme chaperone. Regulates heme synthesis via interactions with FECH and acts as a heme donor for at least some hemoproteins (PubMed:[27599036](http://www.uniprot.org/citations/27599036)). Forms a ternary complex with TMEM97 receptor and low density lipid receptor/LDLR, which increases LDLR-mediated LDL lipoprotein internalization (PubMed:[30443021](http://www.uniprot.org/citations/30443021)).

Cellular Location

Microsome membrane {ECO:0000250|UniProtKB:Q95250}; Single-pass membrane protein. Smooth endoplasmic reticulum membrane; Single-pass membrane protein. Mitochondrion outer membrane {ECO:0000250|UniProtKB:O55022}; Single-pass membrane protein; Extracellular side {ECO:0000250|UniProtKB:O55022} Secreted Note=Localized at cell membrane, probably in lipid rafts, in serum- starved conditions.

Tissue Location

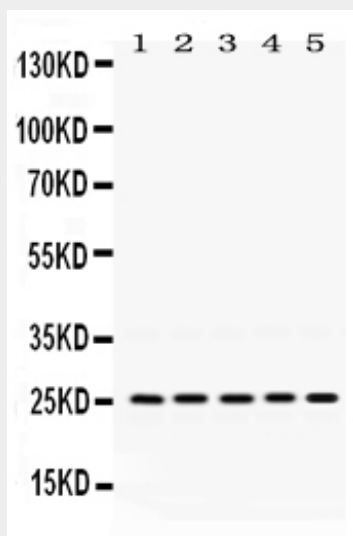
Detected in urine (at protein level) (PubMed:36213313, PubMed:37453717). Expressed by endometrial glands and stroma (at protein level) (PubMed:23793472). Widely expressed, with highest expression in liver and kidney.

Anti-PGRMC1 Picoband Antibody - Protocols

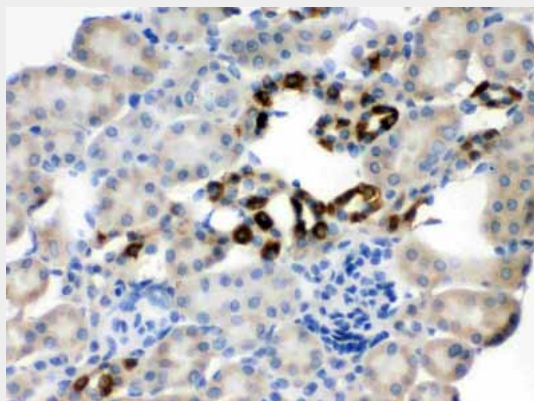
Provided below are standard protocols that you may find useful for product applications.

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

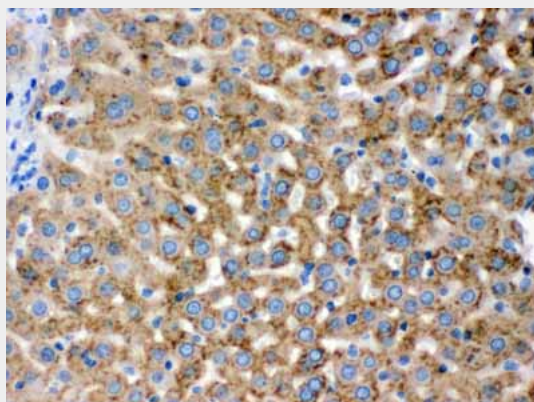
Anti-PGRMC1 Picoband Antibody - Images



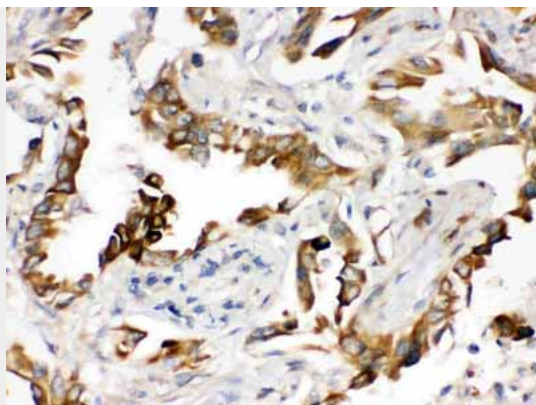
Anti- PGRMC1 Picoband antibody, ABO12461, Western blotting
All lanes: Anti PGRMC1 (ABO12461) at 0.5ug/ml
Lane 1: Rat Liver Tissue Lysate at 50ug
Lane 2: Rat Kidney Tissue Lysate at 50ug
Lane 3: Mouse Liver Tissue Lysate at 50ug
Lane 4: Mouse Kidney Tissue Lysate at 50ug
Lane 5: SMMC Whole Cell Lysate at 40ug
Predicted bind size: 26KD
Observed bind size: 26KD



Anti- PGRMC1 Picoband antibody, ABO12461, IHC(P)
IHC(P): Mouse Kidney Tissue



Anti- PGRMC1 Picoband antibody, ABO12461, IHC(P)
IHC(P): Rat Liver Tissue



Anti- PGRMC1 Picoband antibody, ABO12461, IHC(P)IHC(P): Human Lung Cancer Tissue

Anti-PGRMC1 Picoband Antibody - Background

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.