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Anti-PGRMC1 Picoband Antibody

Catalog # ABO12461

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.

Additional Information

Gene ID	10857
Other Names	Membrane-associated progesterone receptor component 1, mPR, PGRMC1, HPR6.6, PGRMC
Calculated MW	21671
Application Details	Immunohistochemistry(Paraffin-embedded Section), 0.5-1 □g/ml, Human, Mouse, Rat, By Heat Western blot, 0.1-0.5 □g/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.
Source	Eukaryota
Protein Name	Membrane-associated progesterone receptor component 1
Contents	Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na2HPO4, 0.05mg NaN3.
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 r˚Constitution, 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.

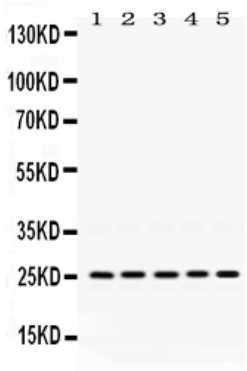
Protein Information

Name	PGRMC1 (HGNC:16090)
Function	Component of a progesterone-binding protein complex (PubMed: 28396637). Binds progesterone (PubMed: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). Forms a ternary complex with TMEM97 receptor and low density lipid receptor/LDLR, which increases LDLR-mediated LDL lipoprotein internalization (PubMed: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.

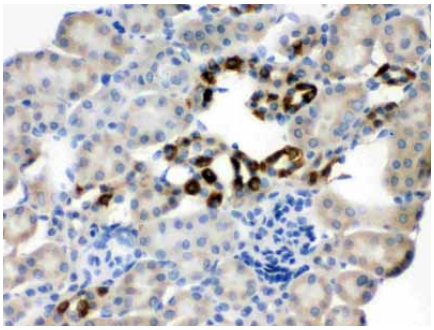
Background

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.

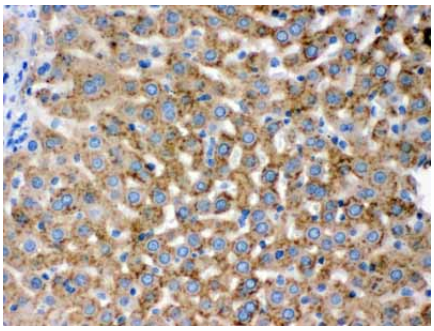
Images



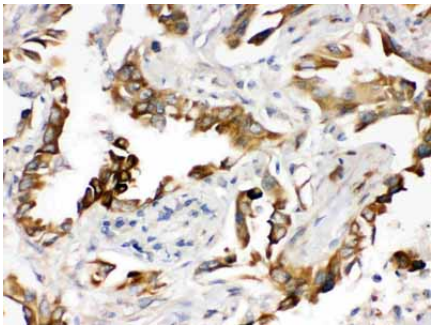
Anti- PGRMC1 Picoband antibody, ABO12461, Western blottingAll lanes: Anti PGRMC1 (ABO12461) at 0.5ug/mlLane 1: Rat Liver Tissue Lysate at 50ugLane 2: Rat Kidney Tissue Lysate at 50ugLane 3: Mouse Liver Tissue Lysate at 50ugLane 4: Mouse Kidney Tissue Lysate at 50ugLane 5: SMMC Whole Cell Lysate at 40ugPredicted bind size: 26KDObserved 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

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.