

PGRMC Polyclonal Antibody

Purified Rabbit Polyclonal Antibody (Pab)

Catalog # AP58346

Product Information

Application	IHC-P, IHC-F, IF, E
Primary Accession	O00264
Reactivity	Rat, Pig, Bovine
Host	Rabbit
Clonality	Polyclonal
Calculated MW	21671
Physical State	Liquid
Immunogen	KLH conjugated synthetic peptide derived from human PGRMC
Epitope Specificity	75-170/195
Isotype	IgG
Purity	affinity purified by Protein A
Buffer	0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.
SUBCELLULAR LOCATION	Microsome membrane; Single-pass membrane protein (By similarity). Endoplasmic reticulum membrane; Single-pass membrane protein (By similarity).
SIMILARITY	Belongs to the cytochrome b5 family. MAPR subfamily. Contains 1 cytochrome b5 heme-binding domain.
Important Note	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
Background Descriptions	PGRMC1 is a progesterone receptor component of 195 aa with a 26 residue N terminal hydrophobic region and no N terminal glycosylation site. It has an overall homology of 50% with PGRMC2 but their C terminal regions have a 68% homology, including a highly conserved 58 residue sequence. PGRMC1 is a heme bind proteins that is up-regulated in several cancers. In breast tumors, PGRMC1 is associated with hypoxia estrogen receptor-negative status. PGRMC1 is also shown to stimulate AKT phosphorylation and is known to stabilise the EGFR receptor tyrosine kinase.

Additional Information

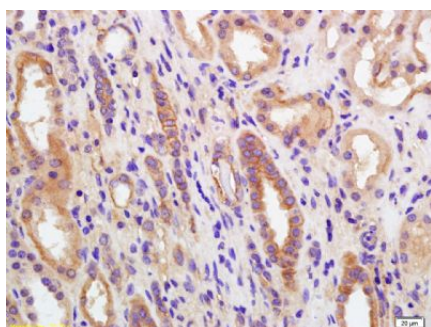
Gene ID	10857
Other Names	Membrane-associated progesterone receptor component 1, mPR, Dap1, IZA, PGRMC1 (HGNC:16090)
Target/Specificity	Widely expressed, with highest expression in liver and kidney.
Dilution	IHC-P=1:100-500,IHC-F=1:100-500,IF=1:100-500,ELISA=1:5000-10000
Format	0.01M TBS(pH7.4) with 1% BSA, 0.09% (W/V) sodium azide and 50% Glyce

Storage Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.

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.

Images



Tissue/cell: human kidney tissue; 4%
Paraformaldehyde-fixed and paraffin-embedded;
Antigen retrieval: citrate buffer (0.01M, pH 6.0), Boiling bathing for 15min; Block endogenous peroxidase by 3% Hydrogen peroxide for 30min; Blocking buffer (normal goat serum,C-0005) at 37°C for 20 min;
Incubation: Anti-PGRMC Polyclonal Antibody, Unconjugated(AP58346) 1:200, overnight at 4°C, followed by conjugation to the secondary antibody(SP-0023) and DAB(C-0010) staining

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