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Goat Anti-PGRMC1 / MPR Antibody
Peptide-affinity purified goat antibody
Catalog # AF1818a

Specification

Goat Anti-PGRMC1 / MPR Antibody - Product Information

Application	**WB, E**
Primary Accession	O00264
Other Accession	NP_006658, 10857, 53328 (mouse)
Reactivity	**Human**
Predicted	**Mouse, Rat**
Host	**Goat**
Clonality	**Polyclonal**
Concentration	**0.5mg/ml**
Isotype	**IgG**
Calculated MW	**21671**

Goat Anti-PGRMC1 / MPR Antibody - Additional Information

Gene ID 10857

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

Dilution
WB~~1:1000
E~~N/A

Format
0.5 mg IgG/ml in Tris saline (20mM Tris pH7.3, 150mM NaCl), 0.02% sodium azide, with 0.5% bovine serum albumin

Storage
Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions
Goat Anti-PGRMC1 / MPR Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Goat Anti-PGRMC1 / MPR Antibody - 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.

Goat Anti-PGRMC1 / MPR 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 Cytomety
- Cell Culture

Goat Anti-PGRMC1 / MPR Antibody - Images

AF1818a (0.1 µg/ml) staining of Human Kidney lysate (35 µg protein in RIPA buffer). Primary incubation was 1 hour. Detected by chemiluminescence.

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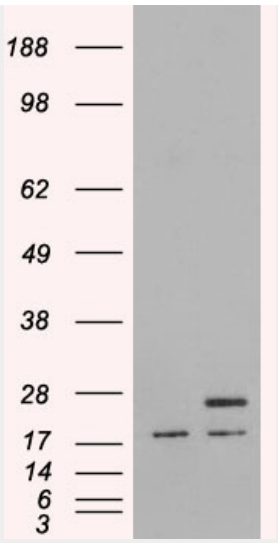

HEK293 overexpressing Human PGRMC1 (RC201918) and probed with AF1818a (mock transfection in first lane), tested by Origene. Result obtained with a previous batch.

Goat Anti-PGRMC1 / MPR Antibody - Background

This gene encodes a putative membrane-associated progesterone steroid receptor. The protein is expressed predominantly in the liver and kidney.

Goat Anti-PGRMC1 / MPR Antibody - References

Progesterone receptor membrane component 1 (Pgrmc1): a heme-1 domain protein that promotes tumorigenesis and is inhibited by a small molecule. Ahmed IS, et al. J Pharmacol Exp Ther, 2010 May. PMID 20164297. Progesterone receptor membrane component-1 regulates the development and Cisplatin sensitivity of human ovarian tumors in athymic nude mice. Peluso JJ, et al. Endocrinology, 2009 Nov. PMID 19797399. Racial disparity in pathophysiologic pathways of preterm birth based on genetic variants. Menon R, et al. Reprod Biol Endocrinol, 2009 Jun 15. PMID 19527514. Progesterone activates a progesterone receptor membrane component 1-dependent mechanism that promotes human granulosa/luteal cell survival but not progesterone secretion. Peluso JJ, et al. J Clin Endocrinol Metab, 2009 Jul. PMID 19417032. Spontaneous preterm birth in African Americans is associated with infection and inflammatory response gene variants. Velez DR, et al. Am J Obstet Gynecol, 2009 Feb. PMID 19019335.