

# Mouse Monoclonal Antibody to PGRMC1

Purified Mouse Monoclonal Antibody Catalog # AO2363a

## **Product Information**

**Application** WB, IHC, FC, ICC, E

Primary Accession

Reactivity

Host

Clonality

Clone Names

Isotype

Calculated MW

Monoclonal

7G11G8

Mouse IgG1

21671

**Description** This gene encodes a putative membrane-associated progesterone steroid

receptor. The protein is expressed predominantly in the liver and kidney.;

Immunogen Purified recombinant fragment of human PGRMC1 (AA: 1-195) expressed in E.

Coli.

**Formulation** Purified antibody in PBS with 0.05% sodium azide

**Application Note** ELISA: 1/10000; WB: 1/500 - 1/2000; IHC: 1/200 - 1/1000; ICC: 1/200 - 1/1000;

FCM: 1/200 - 1/400

## **Additional Information**

**Gene ID** 10857

Other Names MPR; HPR6.6

**Dilution** WB~~1:1000 IHC~~1:100~500 FC~~1:10~50 ICC~~N/A E~~N/A

**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**Mouse Monoclonal Antibody to PGRMC1 is for research use only and not for

use in diagnostic or therapeutic procedures.

## **Protein Information**

Name PGRMC1 ( HGNC:16090)

**Function** Component of a progesterone-binding protein complex (PubMed: <u>28396637</u>).

Binds progesterone (PubMed: <u>25675345</u>). 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.

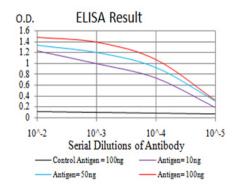
### **Tissue Location**

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.

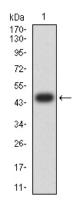
## References

1.Cancer Lett. 2015 Jan 28;356(2 Pt B):434-42.; 2.Nan Fang Yi Ke Da Xue Xue Bao. 2012 May;32(5):635-8.;

## **Images**

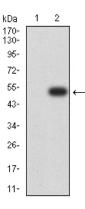


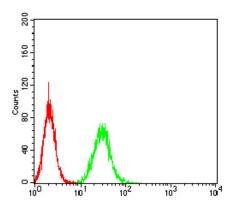
Black line: Control Antigen (100 ng); Purple line: Antigen (10ng); Blue line: Antigen (50 ng); Red line: Antigen (100 ng)



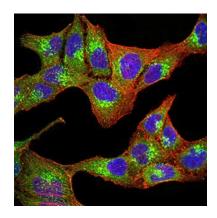
Western blot analysis using PGRMC1 mAb against human PGRMC1 (AA: 1-195) recombinant protein. (Expected MW is 47.6 kDa)

Western blot analysis using PGRMC1 mAb against HEK293 (1) and PGRMC1 (AA: 1-195)-hIgGFc transfected HEK293 (2) cell lysate.

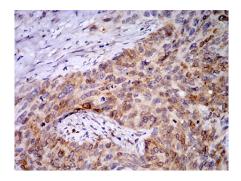




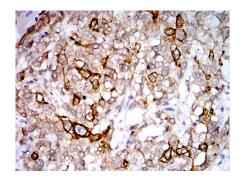
Flow cytometric analysis of A549 cells using PGRMC1 mouse mAb (green) and negative control (red).



Immunofluorescence analysis of SK-OV-3 cells using PGRMC1 mouse mAb (green). Blue: DRAQ5 fluorescent DNA dye. Red: Actin filaments have been labeled with Alexa Fluor- 555 phalloidin. Secondary antibody from Fisher



Immunohistochemical analysis of paraffin-embedded cervical cancer tissues using PGRMC1 mouse mAb with DAB staining.



Immunohistochemical analysis of paraffin-embedded breast cancer tissues using PGRMC1 mouse mAb with DAB staining.

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