

PGRMC2 (134.6): sc-100904

BACKGROUND

PGRMC2 (progesterone receptor membrane component 2), also known as DG6 (steroid receptor protein DG6) or PMBP (progesterone membrane-binding protein), is a single pass membrane protein belonging to the cytochrome $\beta 5$ family (MAPR (membrane associated progesterone receptor) subfamily). Expressed in sperm, PGRMC2 is believed to function as a steroid receptor and may participate in the progesterone-dependent sperm acrosome reaction. PGRMC2 shares approximately 50% overall sequence identity with its close relative PGRMC1. The loss of the gene encoding PGRMC2 is associated with metastasis in uterine endocervical adenocarcinomas, implicating a potential role of PGRMC2 in the suppression of metastasis of endocervical adenocarcinomas.

REFERENCES

- Gerdes, D., et al. 1998. Cloning and tissue expression of two putative steroid membrane receptors. *Biol. Chem.* 379: 907-911.
- Online Mendelian Inheritance in Man, OMIM™. 2002. Johns Hopkins University, Baltimore, MD. MIM Number: 607735. World Wide Web URL: <http://www.ncbi.nlm.nih.gov/omim/>
- Hirai, Y., et al. 2004. Putative gene loci associated with carcinogenesis and metastasis of endocervical adenocarcinomas of uterus determined by conventional and array-based CGH. *Am. J. Obstet. Gynecol.* 191: 1173-1182.
- Lösel, R., et al. 2005. Classic and non-classic progesterone receptors are both expressed in human spermatozoa. *Horm. Metab. Res.* 37: 10-14.
- Nilsson, E.E., et al. 2006. Interactions between progesterone and tumor necrosis factor α in the regulation of primordial follicle assembly. *Reproduction* 132: 877-886.
- Cahill, M.A. 2007. Progesterone receptor membrane component 1: an integrative review. *J. Steroid Biochem. Mol. Biol.* 105: 16-36.

CHROMOSOMAL LOCATION

Genetic locus: PGRMC2 (human) mapping to 4q28.2; Pgrmc2 (mouse) mapping to 3 B.

SOURCE

PGRMC2 (134.6) is a mouse monoclonal antibody raised against recombinant PGRMC2 of human origin.

PRODUCT

Each vial contains 100 μ g IgG γ kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

STORAGE

Store at 4° C, **DO NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

PROTOCOLS

See our web site at www.scbt.com for detailed protocols and support products.

APPLICATIONS

PGRMC2 (134.6) is recommended for detection of PGRMC2 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 μ g per 100-500 μ g of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500), immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for PGRMC2 siRNA (h): sc-88944, PGRMC2 siRNA (m): sc-106403, PGRMC2 shRNA Plasmid (h): sc-88944-SH, PGRMC2 shRNA Plasmid (m): sc-106403-SH, PGRMC2 shRNA (h) Lentiviral Particles: sc-88944-V and PGRMC2 shRNA (m) Lentiviral Particles: sc-106403-V.

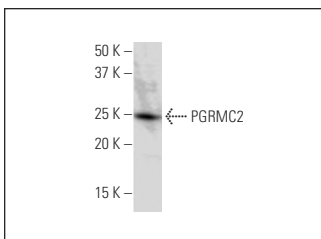
Molecular Weight of PGRMC2: 24 kDa.

Positive Controls: HeLa whole cell lysate: sc-2200

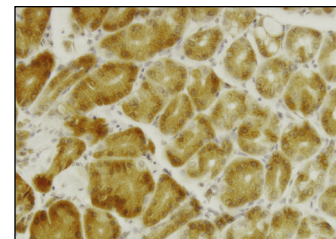
RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgG κ BP-HRP: sc-516102 or m-IgG κ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use m-IgG κ BP-FITC: sc-516140 or m-IgG κ BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz® Mounting Medium: sc-24941 or UltraCruz® Hard-set Mounting Medium: sc-359850. 4) Immunohistochemistry: use m-IgG κ BP-HRP: sc-516102 with DAB, 50X: sc-24982 and Immunohistomount: sc-45086, or Organo/Limonene Mount: sc-45087.

DATA



PGRMC2 (134.6): sc-100904. Western blot analysis of PGRMC2 expression in HeLa whole cell lysate.



PGRMC2 (134.6): sc-100904. Immunoperoxidase staining of formalin-fixed, paraffin-embedded human stomach tissue showing cytoplasmic localization.

SELECT PRODUCT CITATIONS

- Shen, J.J., et al. 2020. Oroxlylin A exerts anticancer effects on human ovarian cancer cells via the PPAR γ -dependent reversal of the progesterone receptor membrane component 1/2 expression profile. *Oncol. Rep.* 43: 1309-1318.

RESEARCH USE

For research use only, not for use in diagnostic procedures.