

PGRMC1 (D-16): sc-82694

BACKGROUND

PGRMC1 (progesterone receptor membrane component 1), also known as MPR, is a 195 amino acid single-pass membrane protein that localizes to both the endoplasmic reticulum and to the microsome, and contains one cytochrome b5 heme-binding domain. Expressed in a variety of tissues with highest expression in kidney and liver, PGRMC1 functions as a receptor for progesterone, a steroid hormone that is involved in embryonic development and is crucial for proper female maturation. The gene encoding PGRMC1 maps to human chromosome X, which contains nearly 153 million base pairs and houses over 1,000 genes. In conjunction with chromosome Y, chromosome X is responsible for sex determination; an X and a Y chromosome lead to normal male development, while two copies of an X chromosome lead to normal female development. There are a number of conditions related to an abnormal number and combination of sex chromosomes, some of which include Turner's syndrome, color blindness, hemophilia and Duchenne muscular dystrophy.

REFERENCES

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- Lösel, R., et al. 2005. Classic and non-classic progesterone receptors are both expressed in human spermatozoa. *Horm. Metab. Res.* 37: 10-14.
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CHROMOSOMAL LOCATION

Genetic locus: PGRMC1 (human) mapping to Xq24; Pgrmc1 (mouse) mapping to X A3.3.

SOURCE

PGRMC1 (D-16) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of PGRMC1 of human origin.

PRODUCT

Each vial contains 200 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin. Also available as TransCruz reagent for Gel Supershift and ChIP applications, sc-82694 X, 200 µg/0.1 ml.

Blocking peptide available for competition studies, sc-82694 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

PGRMC1 (D-16) is recommended for detection of PGRMC1 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

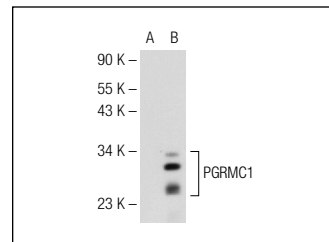
Suitable for use as control antibody for PGRMC1 siRNA (h): sc-76111, PGRMC1 siRNA (m): sc-76112, PGRMC1 shRNA Plasmid (h): sc-76111-SH, PGRMC1 shRNA Plasmid (m): sc-76112-SH, PGRMC1 shRNA (h) Lentiviral Particles: sc-76111-V and PGRMC1 shRNA (m) Lentiviral Particles: sc-76112-V.

PGRMC1 (D-16) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

Molecular Weight of PGRMC1: 28 kDa.

Positive Controls: PGRMC1 (h2): 293T Lysate: sc-171544, Hep G2 cell lysate: sc-2227 or SK-BR-3 cell lysate: sc-2218.

DATA



PGRMC1 (D-16): sc-82694. Western blot analysis of PGRMC1 expression in non-transfected: sc-117752 (A) and human PGRMC1 transfected: sc-171544 (B) 293T whole cell lysates.

SELECT PRODUCT CITATIONS

- Peluso, J.J., et al. 2012. Evidence for a genomic mechanism of action for progesterone receptor membrane component-1. *Steroids* 77: 1007-1012.

STORAGE

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

RESEARCH USE

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



Try **PGRMC1 (C-4): sc-393015** or **PGRMC1 (C-3): sc-271275**, our highly recommended monoclonal alternatives to PGRMC1 (D-16).