

# PRRG2 (E-12): sc-169046

## BACKGROUND

PRRG2 (proline-rich  $\gamma$ -carboxyglutamic acid protein 2), also known as PRGP2 or TMG2 (transmembrane  $\gamma$ -carboxyglutamic acid protein 2), is a 202 amino acid single-pass type I membrane protein that is widely expressed, with highest levels found in thyroid. PRRG2 contains an N-terminal propeptide sequence that allows for vitamin K-dependent  $\gamma$ -carboxylation of various glutamic acid residues, followed by an N-terminal Gla ( $\gamma$ -carboxy-glutamate) domain and transmembrane region. PRRG2 has a proline-rich C-terminus with PPXY and PXXP motifs. The gene encoding PRRG2 maps to human chromosome 19, which consists of over 63 million bases, houses approximately 1,400 genes and is recognized for having the greatest gene density of the human chromosomes. It is the genetic home for a number of immunoglobulin (Ig) superfamily members, including the killer cell and leukocyte Ig-like receptors, a number of ICAMs, the CEACAM and PSG family and Fc receptors (FcRs).

## REFERENCES

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- Trowsdale, J., et al. 2001. The genomic context of natural killer receptor extended gene families. *Immunol. Rev.* 181: 20-38.
- Leeb, T., et al. 2004. Comparative human-mouse-rat sequence analysis of the ICAM gene cluster on HSA 19p13.2 and a 185-kb porcine region from SSC 2q. *Gene* 343: 239-244.
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## CHROMOSOMAL LOCATION

Genetic locus: PRRG2 (human) mapping to 19q13.33; Prrg2 (mouse) mapping to 7 B4.

## SOURCE

PRRG2 (E-12) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an extracellular domain of PRRG2 of human origin.

## STORAGE

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

## PRODUCT

Each vial contains 200  $\mu$ g IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-169046 P, (100  $\mu$ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## APPLICATIONS

PRRG2 (E-12) is recommended for detection of PRRG2 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2  $\mu$ g per 100-500  $\mu$ g 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); non cross-reactive with other PRRG family members.

PRRG2 (E-12) is also recommended for detection of PRRG2 in additional species, including equine, canine and porcine.

Suitable for use as control antibody for PRRG2 siRNA (h): sc-97344, PRRG2 siRNA (m): sc-152517, PRRG2 shRNA Plasmid (h): sc-97344-SH, PRRG2 shRNA Plasmid (m): sc-152517-SH, PRRG2 shRNA (h) Lentiviral Particles: sc-97344-V and PRRG2 shRNA (m) Lentiviral Particles: sc-152517-V.

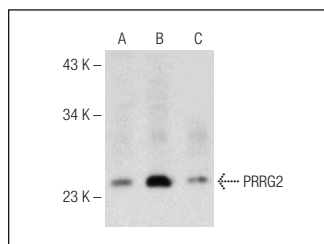
Molecular Weight of PRRG2: 22 kDa.

Positive Controls: A549 cell lysate: sc-2413, SK-BR-3 cell lysate: sc-2218 or HeLa cell lysate: sc-2200.

## RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotting A Blocking Reagent: sc-2333 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 donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

## DATA



PRRG2 (E-12): sc-169046. Western blot analysis of PRRG2 expression in A549 (A), SK-BR-3 (B) and HeLa (C) whole cell lysates.

## RESEARCH USE

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