

# PRDM13 (C-14)-R: sc-107963-R

## BACKGROUND

The PR-domain containing proteins (PRDMs) have a common involvement in the modulation of gene activities. A PR-domain family member usually produces two products, called PR-plus and PR-minus, which differ by the presence or absence of the PR domain, respectively. The PR-plus product is under-expressed or disrupted in cancer cells, whereas the PR-minus product is present or overexpressed in cancer cells. This imbalance in the amount of the two products, which is a result of either genetic or epigenetic events, appears to be a determining factor of malignancy. PRDM13 (PR domain-containing protein 13), also known as PFM10, is a 717 amino acid protein belonging to the PRDM family. Localizing to the nucleus and believed to participate in transcriptional regulation, PRDM13 contains four C<sub>2</sub>H<sub>2</sub>-type zinc fingers and one SET domain. In addition, PRDM13 may function as a tumor suppressor.

## REFERENCES

- Liu, L., et al. 1997. The retinoblastoma interacting zinc finger gene RIZ produces a PR domain-lacking product through an internal promoter. *J. Biol. Chem.* 272: 2984-2991.
- Huang, S. 1999. The retinoblastoma protein-interacting zinc finger gene RIZ in 1p36-linked cancers. *Front Biosci.* 4: D528-D532.
- Jiang, G.L., et al. 2000. The yin-yang of PR-domain family genes in tumorigenesis. *Histol. Histopathol.* 15: 109-117.
- Nagase, T., et al. 2000. Prediction of the coding sequences of unidentified human genes. XV. The complete sequences of 100 new cDNA clones from brain which code for large proteins *in vitro*. *DNA Res.* 6: 337-345.
- Strausberg, R.L., et al. 2002. Generation and initial analysis of more than 15,000 full-length human and mouse cDNA sequences. *Proc. Natl. Acad. Sci. USA* 99: 16899-16903.
- Behrends, U., et al. 2003. Novel tumor antigens identified by autologous antibody screening of childhood medulloblastoma cDNA libraries. *Int. J. Cancer* 106: 244-251.
- Wilm, T.P., et al. 2004. Essential roles of a zebrafish prdm1/blim organogenesis. *Development* 132: 393-404.
- Fitzgerald, J., et al. 2004. Why mice have lost genes for COL21A1, STK17A, GPR145 and AHR1: evidence for gene deletion at evolutionary breakpoints in the rodent lineage. *Trends Genet.* 20: 408-412.

## CHROMOSOMAL LOCATION

Genetic locus: PRDM13 (human) mapping to 6q16.2; Prdm13 (mouse) mapping to 4 A3.

## SOURCE

PRDM13 (C-14)-R is an affinity purified rabbit polyclonal antibody raised against a peptide mapping at the C-terminus of PRDM13 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 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-107963 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## APPLICATIONS

PRDM13 (C-14) is recommended for detection of PRDM13 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), 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 PRDM family members.

PRDM13 (C-14) is also recommended for detection of PRDM13 in additional species, including equine, canine, bovine, porcine and avian.

Suitable for use as control antibody for PRDM13 siRNA (h): sc-95476, PRDM13 siRNA (m): sc-152447, PRDM13 shRNA Plasmid (h): sc-95476-SH, PRDM13 shRNA Plasmid (m): sc-152447-SH, PRDM13 shRNA (h) Lentiviral Particles: sc-95476-V and PRDM13 shRNA (m) Lentiviral Particles: sc-152447-V.

Molecular Weight of PRDM13: 75 kDa.

## RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunofluorescence: use goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

## RESEARCH USE

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

## PROTOCOLS

See our web site at [www.scbt.com](http://www.scbt.com) or our catalog for detailed protocols and support products.