SANTA CRUZ BIOTECHNOLOGY, INC.

PRDM15 (L-17): sc-83312

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The Power to Question

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 underexpressed 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. PRDM15 (PR domain-containing protein 15), also known as PFM15 or ZNF298, is a 1,507 amino acid protein belonging to the PRDM family. Localizing to the nucleus, PRDM15 contains 16 C_2H_2-type zinc fingers and one SET domain. It is believed to participate in transcriptional regulation and may be involved in cell differentiation and tumorigenesis.

REFERENCES

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3. Jiang, G.L. and Huang, S. 2000. The yin-yang of PR-domain family genes in tumorigenesis. Histol. Histopathol. 15: 109-117.
4. 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.
5. Wilm, T.P. and Solnica-Krezel, L. 2004. Essential roles of a zebrafish PRDM1/Blimp1 organogenesis. Development 132: 393-404.
6. Fitzgerald, J. and Bateman, J.F. 2004. Why mice have lost genes for COL21A1, STK17A, GPR145 and AHRI: evidence for gene deletion at evolutionary breakpoints in the rodent lineage. Trends Genet. 20: 408-412.
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CHROMOSOMAL LOCATION

Genetic locus: PRDM15 (human) mapping to 21q22.3; Prdm15 (mouse) mapping to 16 C4.

SOURCE

PRDM15 (L-17) is an affinity purified rabbit polyclonal antibody raised against a peptide mapping near the C-terminus of PRDM15 of human origin.

PRODUCT

Each vial contains 100 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-83312 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

PRDM15 (L-17) is recommended for detection of PRDM15 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); non cross-reactive with other PRDM family members.

PRDM15 (L-17) is also recommended for detection of PRDM15 in additional species, including canine, bovine and porcine.

Suitable for use as control antibody for PRDM15 siRNA (h): sc-91394, PRDM15 siRNA (m): sc-152449, PRDM15 shRNA Plasmid (h): sc-91394-SH, PRDM15 shRNA Plasmid (m): sc-152449-SH, PRDM15 shRNA (h) Lentiviral Particles: sc-91394-V and PRDM15 shRNA (m) Lentiviral Particles: sc-152449-V.

Molecular Weight of PRDM15: 169 kDa.

Positive Controls: SK-N-MC nuclear extract: sc-2154, MCF7 nuclear extract: sc-2149 or Jurkat nuclear extract: sc-2132.

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) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) 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.

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.

PROTOCOLS

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