

PRDM6 (M-159): sc-98736

BACKGROUND

PRDM6 is a zinc-finger domain containing protein that belongs to a family of PRDM (PRDI-BF1 and RIZ homology domain) proteins that act as agents for chromatin remodeling. The PRDM family is often associated with gene regulation and chromatin remodeling by way of their histone methyltransferase abilities. PRDM6 can function as a transcriptional repressor through interactions with the deacetylases and methyltransferases associated with Histone H4. PRDM6 is expressed in vascular precursor cells and likely has a role in development and differentiation of vascular tissue through its ability to remodel chromatin.

REFERENCES

1. Luo, J., et al. 2005. Strong reproductive skew among males in the multiply mated swordtail *Xiphophorus multilineatus* (*Teleostei*). *J. Hered.* 96: 346-355.
2. Oppezzo, P., et al. 2005. Different isoforms of BSAP regulate expression of AID in normal and chronic lymphocytic leukemia B cells. *Blood* 105: 2495-2503.
3. Davis, C.A., et al. 2006. PRISM/PRDM6, a transcriptional repressor that promotes the proliferative gene program in smooth muscle cells. *Mol. Cell Biol.* 26: 2626-2636.
4. Fumasoni, I., et al. 2007. Family expansion and gene rearrangements contributed to the functional specialization of PRDM genes in vertebrates. *BMC Evol. Biol.* 7: 187.
5. Armengol, G., et al. 2007. Genomic imbalances in Schistosoma-associated and non-Schistosoma-associated bladder carcinoma. An array comparative genomic hybridization analysis. *Cancer Genet. Cytogenet.* 177: 16-19.
6. Wu, Y., et al. 2008. PRDM6 is enriched in vascular precursors during development and inhibits endo-thelial cell proliferation, survival and differentiation. *J. Mol. Cell. Cardiol.* 44: 47-58.

CHROMOSOMAL LOCATION

Genetic locus: PRDM6 (human) mapping to 5q23.2; Prdm6 (mouse) mapping to 18 D1.

SOURCE

PRDM6 (M-159) is a rabbit polyclonal antibody raised against amino acids 362-520 mapping within an internal region of PRDM6 of mouse origin.

PRODUCT

Each vial contains 200 µg IgG 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.

RESEARCH USE

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

APPLICATIONS

PRDM6 (M-159) is recommended for detection of PRDM6 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 PRDM6 siRNA (h): sc-92055, PRDM6 siRNA (m): sc-152450, PRDM6 shRNA Plasmid (h): sc-92055-SH, PRDM6 shRNA Plasmid (m): sc-152450-SH, PRDM6 shRNA (h) Lentiviral Particles: sc-92055-V and PRDM6 shRNA (m) Lentiviral Particles: sc-152450-V.

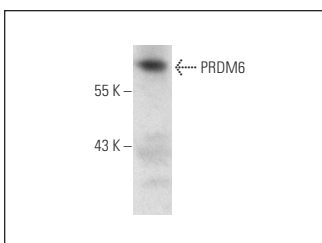
Molecular Weight of PRDM6: 67 kDa.

Positive Controls: Jurkat nuclear extract: sc-2132.

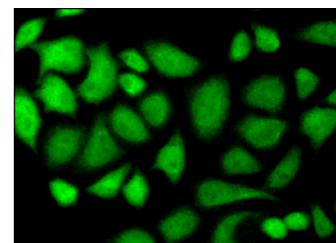
RECOMMENDED SECONDARY REAGENTS

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.

DATA



PRDM6 (M-159): sc-98736. Western blot analysis of PRDM6 expression in Jurkat nuclear extract.



PRDM6 (M-159): sc-98736. Immunofluorescence staining of formalin-fixed HeLa cells showing nuclear and cytoplasmic localization. Kindly provided by Yang Xiang, Ph.D., Division of Newborn Medicine, Boston Children's Hospital, Cell Biology Department, Harvard Medical School.

PROTOCOLS

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