

PRDM14 (F-10): sc-518186

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. PRDM14 (PR domain-containing protein 14), also known as PFM11, is a 571 amino acid protein belonging to the PRDM family. Localizing to the nucleus, PRDM14 contains six C₂H₂-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

1. 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.
2. Huang, S. 1999. The retinoblastoma protein-interacting zinc finger gene RIZ in 1p36-linked cancers. *Front. Biosci.* 4: D528-532.
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/blim organogenesis. *Development* 132: 393-404.

CHROMOSOMAL LOCATION

Genetic locus: PRDM14 (human) mapping to 8q13.3.

SOURCE

PRDM14 (F-10) is a mouse monoclonal antibody specific for an epitope mapping between amino acids 409-429 of PRDM14 of human origin.

PRODUCT

Each vial contains 200 µg IgG_{2a} kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

PRDM14 (F-10) is available conjugated to agarose (sc-518186 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-518186 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-518186 PE), fluorescein (sc-518186 FITC), Alexa Fluor® 488 (sc-518186 AF488), Alexa Fluor® 546 (sc-518186 AF546), Alexa Fluor® 594 (sc-518186 AF594) or Alexa Fluor® 647 (sc-518186 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-518186 AF680) or Alexa Fluor® 790 (sc-518186 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

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APPLICATIONS

PRDM14 (F-10) is recommended for detection of PRDM14 of human origin by Western Blotting (starting dilution 1:100, 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 PRDM14 siRNA (h): sc-77737, PRDM14 shRNA Plasmid (h): sc-77737-SH and PRDM14 shRNA (h) Lentiviral Particles: sc-77737-V.

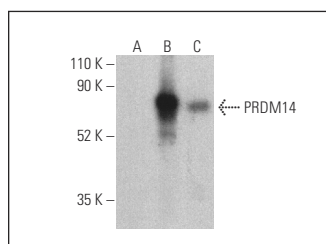
Molecular Weight of PRDM14: 64 kDa.

Positive Controls: PRDM14 (h2): 293T Lysate: sc-373023 or NTERA-2 cl.D1 whole cell lysate: sc-364181.

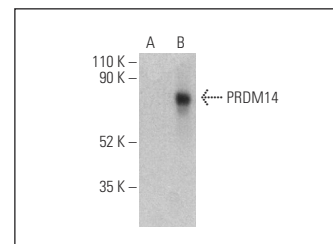
RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgGκ BP-HRP: sc-516102 or m-IgGκ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 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 m-IgGκ BP-FITC: sc-516140 or m-IgGκ BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz® Mounting Medium: sc-24941 or UltraCruz® Hard-set Mounting Medium: sc-359850.

DATA



PRDM14 (F-10): sc-518186. Western blot analysis of PRDM14 expression in non-transfected 293T: sc-117752 (A), human PRDM14 transfected 293T: sc-373023 (B) and NTERA-2 cl.D1 (C) whole cell lysates. Detection reagent used: m-IgG_{2a} BP-HRP: sc-542731.



PRDM14 (F-10): sc-518186. Western blot analysis of PRDM14 expression in non-transfected: sc-117752 (A) and human PRDM14 transfected: sc-373023 (B) whole cell lysates. Detection reagent used: m-IgG Fc BP-HRP: sc-525409.

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 for detailed protocols and support products.