

PRDM8 (E-3): sc-390001

BACKGROUND

Usually, two products are produced from a PR-domain family member; these products differ by the presence or absence of the PR domain. The PR-plus product is underexpressed or disrupted, 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 cause of malignancy. PRDM8 in particular is thought to be involved in transcriptional regulation. Its subcellular location is the nucleus and research indicates that PRDM8 contains three C₂H₂-type zinc fingers and one SET domain.

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. Jiang, G.L. and Huang, S. 2000. The yin-yang of PR-domain family genes in tumorigenesis. *Histol. Histopathol.* 15: 109-117.
3. 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.

CHROMOSOMAL LOCATION

Genetic locus: PRDM8 (human) mapping to 4q21.21; Prdm8 (mouse) mapping to 5 E3.

SOURCE

PRDM8 (E-3) is a mouse monoclonal antibody raised against amino acids 1-125 mapping at the N-terminus of PRDM8 of human origin.

PRODUCT

Each vial contains 200 µg IgG_{2b} kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin. Also available as TransCruz reagent for Gel Supershift and ChIP applications, sc-390001 X, 200 µg/0.1 ml.

PRDM8 (E-3) is available conjugated to agarose (sc-390001 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-390001 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-390001 PE), fluorescein (sc-390001 FITC), Alexa Fluor® 488 (sc-390001 AF488), Alexa Fluor® 546 (sc-390001 AF546), Alexa Fluor® 594 (sc-390001 AF594) or Alexa Fluor® 647 (sc-390001 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-390001 AF680) or Alexa Fluor® 790 (sc-390001 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

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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

PRDM8 (E-3) is recommended for detection of PRDM8 of mouse, rat and 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 PRDM8 siRNA (h): sc-61399, PRDM8 siRNA (m): sc-61400, PRDM8 shRNA Plasmid (h): sc-61399-SH, PRDM8 shRNA Plasmid (m): sc-61400-SH, PRDM8 shRNA (h) Lentiviral Particles: sc-61399-V and PRDM8 shRNA (m) Lentiviral Particles: sc-61400-V.

PRDM8 (E-3) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

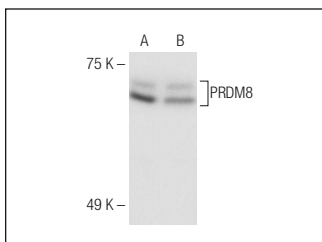
Molecular Weight of PRDM8: 72 kDa.

Positive Controls: HT-1080 whole cell lysate: sc-364183 or MCF7 whole cell lysate: sc-2206.

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



PRDM8 (E-3): sc-390001. Western blot analysis of PRDM8 expression in HT-1080 (A) and MCF7 (B) whole cell lysates.

PROTOCOLS

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