# SANTA CRUZ BIOTECHNOLOGY, INC.

# 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 an 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  $C_2H_2$ -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.
- Strausberg, R.L., et al. 2002. Generation and initial analysis of more than 15,000 full-length human and mous 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  $\mu$ g lgG<sub>2b</sub> 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  $\mu$ g/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<sup>®</sup> 488 (sc-390001 AF488), Alexa Fluor<sup>®</sup> 546 (sc-390001 AF546), Alexa Fluor<sup>®</sup> 594 (sc-390001 AF594) or Alexa Fluor<sup>®</sup> 647 (sc-390001 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor<sup>®</sup> 680 (sc-390001 AF680) or Alexa Fluor<sup>®</sup> 790 (sc-390001 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

Alexa Fluor® is a trademark of Molecular Probes, Inc., Oregon, USA

## **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<sup>™</sup> Molecular Weight Standards: sc-2035, UltraCruz<sup>®</sup> 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<sup>®</sup> Mounting Medium: sc-24941 or UltraCruz<sup>®</sup> 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.