SANTA CRUZ BIOTECHNOLOGY, INC.

PRDM12 (A-13): sc-132046

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

BACKGROUND

The PR-domain containing proteins (PRDMs) have a common involvment in the modulation of gene activities. PRDM1, previously designated Blimp1, is a transcriptional repressor expressed during the late stages of B cell differentiation in immunoglobulin-secreting plasma cells, as well as in long-lived, bone marrow plasma cells. PRDM3, or myelodysplasia syndrome protein 1 (MDS1), is a transcription factor associated with myeloid leukemia. Originally identified as SC-1, PRDM4 is predominantly found in the cytoplasm, but translocates into the nucleus upon serum-starvation. PRDM5, PRDM8 and PRDM10 may function as transcription factors. PRDM12 may represent a tumor suppressor involved in chronic myeloid leukemia (CML).

REFERENCES

1. Huang, S. 1999. The retinoblastoma protein-interacting zinc finger gene RIZ in 1p36-linked cancers. Front. Biosci. 4: D528-D532.
2. Nagase, T., Ishikawa, K., Kikuno, R., Hirosawa, M., Nomura, N. and Ohara, O. 2000. Prediction of the coding sequences of unidentified human genes. XV. The complete sequences of 100 new cDNA clones from brain which code for large proteins *in vitro*. DNA Res. 6: 337-345.
3. Kolomietz, E., Marrano, P., Yee, K., Thai, B., Braude, I., Kolomietz, A., Chun, K., Minkin, S., Kamel-Reid, S., Minden, M. and Squire, J.A. 2003. Quantitative PCR identifies a minimal deleted region of 120 kb extending from the Philadelphia chromosome ABL translocation breakpoint in chronic myeloid leukemia with poor outcome. Leukemia 17: 1313-1323.
4. Reid, A.G. and Nacheva, E.P. 2003. A potential role for PRDM12 in the pathogenesis of chronic myeloid leukaemia with derivative chromosome 9 deletion. Leukemia 18: 178-180.
5. Wilm, T.P. and Solnica-Krezel, L. 2004. Essential roles of a zebrafish PRDM1/Blimp1 organogenesis. Development 132: 393-404.

CHROMOSOMAL LOCATION

Genetic locus: PRDM12 (human) mapping to 9q34.12; Prdm12 (mouse) mapping to 2 B.

SOURCE

PRDM12 (A-13) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of PRDM12 of human origin.

STORAGE

Store at 4° C, **DO NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

PRODUCT

Each vial contains 200 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-132046 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

PRDM12 (A-13) is recommended for detection of PRDM12 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), 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.

PRDM12 (A-13) is also recommended for detection of PRDM12 in additional species, including avian.

Suitable for use as control antibody for PRDM12 siRNA (h): sc-72133, PRDM12 siRNA (m): sc-152446, PRDM12 shRNA Plasmid (h): sc-72133-SH, PRDM12 shRNA Plasmid (m): sc-152446-SH, PRDM12 shRNA (h) Lentiviral Particles: sc-72133-V and PRDM12 shRNA (m) Lentiviral Particles: sc-152446-V.

Molecular Weight of PRDM12: 40 kDa.

Positive Controls: Hep G2 cell lysate: sc-2227.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (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) Immunofluorescence: use donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

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.