

PRAM-1 (A-5): sc-376451

BACKGROUND

Complete remission of acute promyelocytic leukemia can be achieved by treating patients with retinoic acid, and PML-RAR- α (promyelocytic leukemia-retinoic acid receptor α fusion protein) plays a major role in mediating retinoic acid effects in leukemia cells. The retinoic acid-induced gene, PRAM-1 (PML-RAR- α target gene encoding an adaptor molecule 1) encodes an adaptor protein which is expressed and modulated during normal human myelopoiesis. PRAM-1 expression is hindered by expression of PML-RAR- α . The 718 amino acid PRAM-1 protein contains eight N-terminal proline-rich repeats and several proline residues that are clustered as type I or type II SH3 recognition motifs. PRAM-1 demonstrates expression in hematopoietic tissues and lung.

REFERENCES

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3. Clemens, R.A., et al. 2004. PRAM-1 is required for optimal integrin-dependent neutrophil function. *Mol. Cell. Biol.* 24: 10923-10932.
4. Denis, F.M., et al. 2005. PRAM-1 potentiates arsenic trioxide-induced JNK activation. *J. Biol. Chem.* 280: 9043-9048.
5. Heuer, K., et al. 2006. Lipid-binding HSH3 domains in immune cell adapter proteins. *J. Mol. Biol.* 361: 94-104.
6. Susic, D., et al. 2006. Cardiovascular effects of nonproteolytic activation of prorenin. *Hypertension* 48: e113.
7. Ghaffari, S.H., et al. 2006. Real-time PCR analysis of PML-RAR α in newly diagnosed acute promyelocytic leukaemia patients treated with arsenic trioxide as a front-line therapy. *Ann. Oncol.* 17: 1553-1559.
8. Asou, N., et al. 2007. A randomized study with or without intensified maintenance chemotherapy in patients with acute promyelocytic leukemia who have become negative for PML-RAR α transcript after consolidation therapy: the Japan adult leukemia study group (JALSG) APL97 study. *Blood* 110: 59-66.
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CHROMOSOMAL LOCATION

Genetic locus: PRAM1 (human) mapping to 19p13.2.

SOURCE

PRAM-1 (A-5) is a mouse monoclonal antibody raised against amino acids 323-620 mapping within an internal region of PRAM-1 of human origin.

PRODUCT

Each vial contains 200 μ g IgG γ kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

APPLICATIONS

PRAM-1 (A-5) is recommended for detection of PRAM-1 of human origin by Western Blotting (starting dilution 1:100, dilution range 1:100-1:1000), immunoprecipitation [1-2 μ g per 100-500 μ g of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500), immunohistochemistry (including paraffin-embedded sections) (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 PRAM-1 siRNA (h): sc-61393, PRAM-1 shRNA Plasmid (h): sc-61393-SH and PRAM-1 shRNA (h) Lentiviral Particles: sc-61393-V.

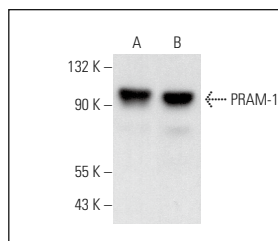
Molecular Weight of PRAM-1: 97 kDa.

Positive Controls: K-562 whole cell lysate: sc-2203 or THP-1 cell lysate: sc-2238.

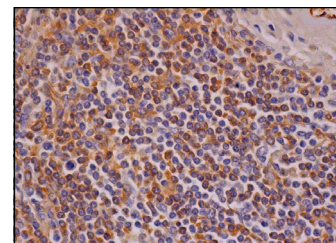
RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgG κ BP-HRP: sc-516102 or m-IgG κ 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-IgG κ BP-FITC: sc-516140 or m-IgG κ BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz® Mounting Medium: sc-24941 or UltraCruz® Hard-set Mounting Medium: sc-359850. 4) Immunohistochemistry: use m-IgG κ BP-HRP: sc-516102 with DAB, 50X: sc-24982 and Immunohistomount: sc-45086, or Organo/Limonene Mount: sc-45087.

DATA



PRAM-1 (A-5): sc-376451. Western blot analysis of PRAM-1 expression in K-562 (A) and THP-1 (B) whole cell lysates.



PRAM-1 (A-5): sc-376451. Immunoperoxidase staining of formalin fixed, paraffin-embedded human spleen tissue showing cytoplasmic staining of cells in white pulp and cells in red pulp.

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.