

PRDM5 (A-12): sc-376277

BACKGROUND

A cDNA of PRDM5 was isolated based upon its homology to the PR domain of PRDM2. The gene encodes an open reading frame of 630 amino acids and contains a PR domain in the NH-terminal region followed by sixteen zinc finger motifs. Through radiation hybrid analysis, PRDM5 was mapped to human chromosome 4q27, a region thought to contain tumor suppressor genes for ovarian, breast, lung, liver, colon, and other cancers. The gene has a CpG island promoter and is silenced in human breast, ovarian, and liver cancers. Upon infection of tumor cells, a recombinant adenovirus expressing PRDM5 causes G₂/M arrest and apoptosis, suggesting that inhibition of PRDM5 may be involved in carcinogenesis.

CHROMOSOMAL LOCATION

Genetic locus: PRDM5 (human) mapping to 4q27; Prdm5 (mouse) mapping to 6 C1.

SOURCE

PRDM5 (A-12) is a mouse monoclonal antibody raised against amino acids 53-175 mapping at the N-terminus of PRDM5 of human origin.

PRODUCT

Each vial contains 200 µg IgG₁ 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-376277 X, 200 µg/0.1 ml.

PRDM5 (A-12) is available conjugated to agarose (sc-376277 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-376277 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-376277 PE), fluorescein (sc-376277 FITC), Alexa Fluor® 488 (sc-376277 AF488), Alexa Fluor® 546 (sc-376277 AF546), Alexa Fluor® 594 (sc-376277 AF594) or Alexa Fluor® 647 (sc-376277 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-376277 AF680) or Alexa Fluor® 790 (sc-376277 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

APPLICATIONS

PRDM5 (A-12) is recommended for detection of PRDM5 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 PRDM5 siRNA (h): sc-61397, PRDM5 siRNA (m): sc-61398, PRDM5 shRNA Plasmid (h): sc-61397-SH, PRDM5 shRNA Plasmid (m): sc-61398-SH, PRDM5 shRNA (h) Lentiviral Particles: sc-61397-V and PRDM5 shRNA (m) Lentiviral Particles: sc-61398-V.

PRDM5 (A-12) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

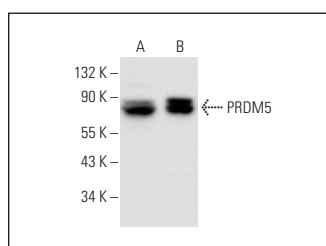
Molecular Weight of PRDM5: 70 kDa.

Positive Controls: KNRK whole cell lysate: sc-2214, HL-60 whole cell lysate: sc-2209 or HuT 78 whole cell lysate: sc-2208.

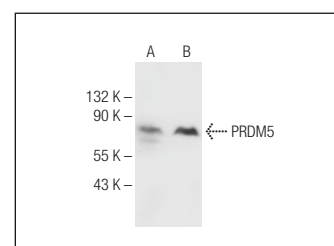
RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgGκ BPHRP: sc-516102 or m-IgGκ BPHRP (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 BPFITC: sc-516140 or m-IgGκ BPPe: sc-516141 (dilution range: 1:50-1:200) with UltraCruz® Mounting Medium: sc-24941 or UltraCruz® Hard-set Mounting Medium: sc-359850.

DATA



PRDM5 (A-12): sc-376277. Western blot analysis of PRDM5 expression in SH-SY5Y (A) and KNRK (B) whole cell lysates.



PRDM5 (A-12): sc-376277. Western blot analysis of PRDM5 expression in HL-60 (A) and HuT 78 (B) whole cell lysates.

SELECT PRODUCT CITATIONS

- Xu, W., et al. 2020. Endocannabinoid signaling regulates the reinforcing and psychostimulant effects of ketamine in mice. *Nat. Commun.* 11: 5962.
- Lan, X., et al. 2022. Bone marrow mesenchymal stem cells-derived exosomes mediate nuclear receptor coactivator-3 expression in osteoblasts by delivering miR-532-5p to influence osteonecrosis of the femoral head development. *Cell Biol. Int.* 46: 2185-2197.

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.

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