

PRMT2 (h): 293T Lysate: sc-172533

BACKGROUND

PRMT2 (protein arginine N-methyltransferase 2) is a 433 amino acid protein encoded by the human gene PRMT2. PRMT2 belongs to the protein arginine N-methyltransferase family and contains one SH3 domain. The primary function of protein methyltransferases is the post-translational methylation of arginine residues. The PRMT family of proteins contains related putative methyltransferase domains that modify chromatin and regulate cellular transcription. Some family members, PRMT1 and PRMT4, show transcriptional modulation and intracellular signaling. Through a highly conserved S-adenosylmethionine-binding domain, PRMT2 inhibits NF κ B-dependent transcription and promotes apoptosis. PRMT2 has this effect by blocking nuclear export of I κ B- α through a leptomycin-sensitive pathway, which increases nuclear I κ B- α and decreases NF κ B DNA binding. PRMT2 also renders cells susceptible to apoptosis by cytokines or cytotoxic drugs.

REFERENCES

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3. Yildirim, A.O., Bulau, P., Zakrzewicz, D., Kitowska, K.E., Weissmann, N., Grimminger, F., Morty, R.E. and Eickelberg, O. 2006. Increased protein arginine methylation in chronic hypoxia: role of protein arginine methyltransferases. Am. J. Respir. Cell Mol. Biol. 35: 436-443.
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5. McGraw, S., Vigneault, C. and Sirard, M.A. 2007. Temporal expression of factors involved in chromatin remodeling and in gene regulation during early bovine *in vitro* embryo development. Reproduction 133: 597-608.
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STORAGE

Store at -20° C. Repeated freezing and thawing should be minimized. Sample vial should be boiled once prior to use. Non-hazardous. No MSDS required.

PROTOCOLS

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

CHROMOSOMAL LOCATION

Genetic locus: PRMT2 (human) mapping to 21q22.3.

PRODUCT

PRMT2 (h): 293T Lysate represents a lysate of human PRMT2 transfected 293T cells and is provided as 100 μ g protein in 200 μ l SDS-PAGE buffer.

APPLICATIONS

PRMT2 (h): 293T Lysate is suitable as a Western Blotting positive control for human reactive PRMT2 antibodies.

Control 293T Lysate: sc-117752 is available as a Western Blotting negative control lysate derived from non-transfected 293T cells.

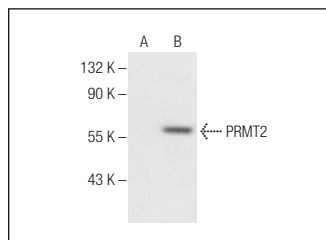
PRMT2 (E-12): sc-390089 is recommended as a positive control antibody for Western Blot analysis of enhanced human PRMT2 expression in PRMT2 transfected 293T cells (starting dilution 1:100, dilution range 1:100-1:1,000).

RECOMMENDED SUPPORT REAGENTS

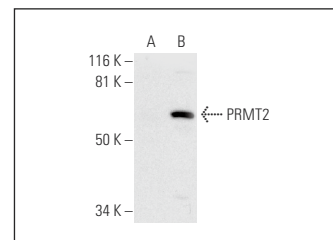
To ensure optimal results, the following support reagents are recommended:

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.

DATA



PRMT2 (E-12): sc-390089. Western blot analysis of PRMT2 expression in non-transfected: sc-117752 (A) and human PRMT2 transfected: sc-172533 (B) 293T whole cell lysates.



PRMT2 (B-11): sc-393254. Western blot analysis of PRMT2 expression in non-transfected: sc-117752 (A) and human PRMT2 transfected: sc-172533 (B) 293T whole cell lysates.

RESEARCH USE

For research use only, not for use in diagnostic procedures.