

PRMT2 (K-17): sc-55001

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 posttranslational 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 NFκB-dependent transcription and promotes apoptosis. PRMT2 has this effect by blocking nuclear export of IκB-α through a leptomycin-sensitive pathway, which increases nuclear IκB-α and decreases NFκB DNA binding. PRMT2 also renders cells susceptible to apoptosis by cytokines or cytotoxic drugs.

REFERENCES

1. Qi, C., et al. 2002. Identification of protein arginine methyltransferase 2 as a co-activator for estrogen receptor α. *J. Biol. Chem.* 277: 28624-28630.
2. Ganesh, L., et al. 2006. Protein methyltransferase 2 inhibits NFκB function and promotes apoptosis. *Mol. Cell. Biol.* 26: 3864-3874.

CHROMOSOMAL LOCATION

Genetic locus: PRMT2 (human) mapping to 21q22.3; Prmt2 (mouse) mapping to 10 C1.

SOURCE

PRMT2 (K-17) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the C-terminus of PRMT2 of human origin.

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-55001 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

PRMT2 (K-17) is recommended for detection of PRMT2 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, 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 PRMT2 siRNA (h): sc-62860, PRMT2 siRNA (m): sc-62861, PRMT2 shRNA Plasmid (h): sc-62860-SH, PRMT2 shRNA Plasmid (m): sc-62861-SH, PRMT2 shRNA (h) Lentiviral Particles: sc-62860-V and PRMT2 shRNA (m) Lentiviral Particles: sc-62861-V.

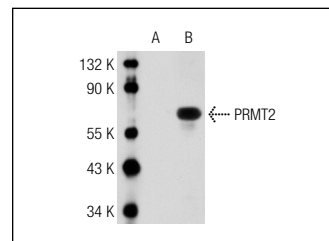
Molecular Weight of PRMT2: 55 kDa.

Positive Controls: HeLa nuclear extract: sc-2120 or PRMT2 (h): 293T Lysate: sc-172533.

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) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) 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.

DATA



PRMT2 (K-17): sc-55001. Western blot analysis of PRMT2 expression in non-transfected: sc-117752 (A) and human PRMT2 transfected: sc-172533 (B) 293T whole cell lysates.

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 or our catalog for detailed protocols and support products.

MONOS
Satisfaction
Guaranteed

Try **PRMT2 (B-11): sc-393254** or **PRMT2 (E-12): sc-390089**, our highly recommended monoclonal alternatives to PRMT2 (K-17).