# PRMT7 (N-17): sc-48660



The Power to Question

#### **BACKGROUND**

Arginine methylation is an irreversible protein modification catalyzed by arginine methyltransferases, such as PRMT7, which uses S-adenosylmethionine (AdoMet) as the methyl donor. Arginine methylation is implicated in signal transduction, RNA transport and RNA splicing. PRMT7 has two methyltransferase domains, each containing a putative AdoMet-binding motif. The N-terminal methyltransferase domain closely resembles the catalytic core of PRMT5, and the C-terminal domain is most similar to that of PRMT1. Three PRMT7 splice variants have been identified by database analysis. PRMT7 is localized to the nucleus and cytoplasm; moderate expression is observed in adult brain and lung tissues.

## **CHROMOSOMAL LOCATION**

Genetic locus: PRMT7 (human) mapping to 16q22.1; Prmt7 (mouse) mapping to 8 D3.

# SOURCE

PRMT7 (N-17) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the N-terminus of PRMT7 of human origin.

#### **PRODUCT**

Each vial contains 200  $\mu g$  lgG in 1.0 ml of PBS with <0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-48660 P, (100  $\mu$ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

### **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.

### **APPLICATIONS**

PRMT7 (N-17) is recommended for detection of PRMT7 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2  $\mu$ g per 100-500  $\mu$ g 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).

PRMT7 (N-17) is also recommended for detection of PRMT7 in additional species, including equine, canine, bovine and avian.

Suitable for use as control antibody for PRMT7 siRNA (h): sc-61405, PRMT7 siRNA (m): sc-61406, PRMT7 shRNA Plasmid (h): sc-61405-SH, PRMT7 shRNA Plasmid (m): sc-61406-SH, PRMT7 shRNA (h) Lentiviral Particles: sc-61405-V and PRMT7 shRNA (m) Lentiviral Particles: sc-61406-V.

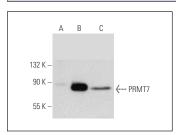
Molecular Weight of PRMT7: 74 kDa.

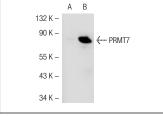
Positive Controls: PRMT7 (h): 293 Lysate: sc-110644, PRMT7 (m3): 293T Lysate: sc-122784 or NIH/3T3 whole cell lysate: sc-2210.

#### **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**





PRMT7 (N-17): sc-48660. Western blot analysis of PRMT7 expression in non-transfected 293T: sc-117752 (A), mouse PRMT7 transfected 293T: sc-122784 (B) and NIH/3T3 (C) whole cell lysates.

PRMT7 (N-17): sc-48660. Western blot analysis of PRMT7 expression in non-transfected: sc-117752 (A) and mouse PRMT7 transfected: sc-122782 (B) 293T whole cell Ivsates.

### **SELECT PRODUCT CITATIONS**

 Buhr, N., et al. 2008. Nuclear proteome analysis of undifferentiated mouse embryonic stem and germ cells. Electrophoresis 29: 2381-2390.

# **PROTOCOLS**

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



Try **PRMT7 (E-9): sc-376077** or **PRMT7 (D-1): sc-166819**, our highly recommended monoclonal alternatives to PRMT7 (N-17).

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