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PRMT7 Antibody (N-term)

Purified Rabbit Polyclonal Antibody (Pab)

Catalog # AP1010a

Specification

PRMT7 Antibody (N-term) - Product Information

Application	**WB, IHC-P,E**
Primary Accession	Q9NVM4
Other Accession	NP_061896
Reactivity	**Human**
Host	**Rabbit**
Clonality	**Polyclonal**
Isotype	**Rabbit IgG**
Calculated MW	**78459**
Antigen Region	**1-30**

PRMT7 Antibody (N-term) - Additional Information

Gene ID 54496

Other Names
Protein arginine N-methyltransferase 7, 211-, Histone-arginine N-methyltransferase PRMT7, [Myelin basic protein]-arginine N-methyltransferase PRMT7, PRMT7, KIAA1933

Target/Specificity
This PRMT7 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 1-30 amino acids from the N-terminal region of human PRMT7.

Dilution
WB~~1:1000
IHC-P~~1:50~100

Format
Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is prepared by Saturated Ammonium Sulfate (SAS) precipitation followed by dialysis against PBS.

Storage
Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions
PRMT7 Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

PRMT7 Antibody (N-term) - Protein Information

Name PRMT7

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Synonyms KIAA1933

Function Arginine methyltransferase that can both catalyze the formation of omega-N monomethylarginine (MMA) and symmetrical dimethylarginine (sDMA), with a preference for the formation of MMA. Specifically mediates the symmetrical dimethylation of arginine residues in the small nuclear ribonucleoproteins Sm D1 (SNRPD1) and Sm D3 (SNRPD3); such methylation being required for the assembly and biogenesis of snRNP core particles. Specifically mediates the symmetric dimethylation of histone H4 'Arg-3' to form H4R3me2s. Plays a role in gene imprinting by being recruited by CTCFL at the H19 imprinted control region (ICR) and methylating histone H4 to form H4R3me2s, possibly leading to recruit DNA methyltransferases at these sites. May also play a role in embryonic stem cell (ESC) pluripotency. Also able to mediate the arginine methylation of histone H2A and myelin basic protein (MBP) in vitro; the relevance of such results is however unclear in vivo.

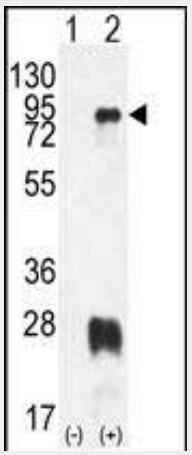
Cellular Location
Cytoplasm, cytosol. Nucleus

PRMT7 Antibody (N-term) - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

PRMT7 Antibody (N-term) - Images



Western blot analysis of PRMT7 (arrow) using rabbit polyclonal PRMT7 Antibody (N-term) (Cat.#AP1010a). 293 cell lysates (2 ug/lane) either nontransfected (Lane 1) or transiently transfected with the PRMT7 gene (Lane 2).

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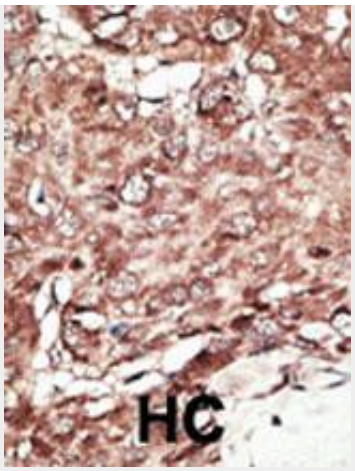

Formalin-fixed and paraffin-embedded human cancer tissue reacted with the primary antibody, which was peroxidase-conjugated to the secondary antibody, followed by AEC staining. This data demonstrates the use of this antibody for immunohistochemistry; clinical relevance has not been evaluated. BC = breast carcinoma; HC = hepatocarcinoma.

PRMT7 Antibody (N-term) - Background

Arginine methylation is an irreversible post translational modification which has only recently been linked to protein activity. At least three types of PRMT enzymes have been identified in mammalian cells. These enzymes have been shown to have essential regulatory functions by methylation of key proteins in several fundamental areas. These protein include nuclear proteins, IL enhancer binding factor, nuclear factors, cell cycle proteins, signal transduction proteins, apoptosis proteins, and viral proteins. The mammalian PRMT family currently consists of 7 members that share two large domains of homology. Outside of these domains, epitopes were identified and antibodies against all 7 PRMT members have been developed.

PRMT7 Antibody (N-term) - References

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