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PRMT7 Antibody (C-term) Blocking Peptide

Synthetic peptide
Catalog # BP1010c

Specification

PRMT7 Antibody (C-term) Blocking Peptide - Product Information

Primary Accession	Q9NVM4
Other Accession	NP_061896

PRMT7 Antibody (C-term) Blocking Peptide - 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
The synthetic peptide sequence used to generate the antibody AP1010c was selected from the C-term region of human PRMT7. A 10 to 100 fold molar excess to antibody is recommended. Precise conditions should be optimized for a particular assay.

Format
Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

Storage
Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

Precautions
This product is for research use only. Not for use in diagnostic or therapeutic procedures.

PRMT7 Antibody (C-term) Blocking Peptide - Protein Information

Name PRMT7

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 (C-term) Blocking Peptide - Protocols

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

- Blocking Peptides

PRMT7 Antibody (C-term) Blocking Peptide - Images

PRMT7 Antibody (C-term) Blocking Peptide - 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 (C-term) Blocking Peptide - References

Lee,J.H., et al. J. Biol. Chem. 280 (5), 3656-3664 (2005)Miranda,T.B., et al. J. Biol. Chem. 279 (22), 22902-22907 (2004)Frankel A., et al. J. Biol. Chem. 277:3537-3543(2002).Pal, S., et al., Mol. Cell. Biol. 23(21):7475-7487 (2003).Rho, J., et al., J. Biol. Chem. 276(14):11393-11401 (2001).Pollack, B.P., et al., J. Biol. Chem. 274(44):31531-31542 (1999).Gilbreth, M., et al., PNAS 95(25):14781-14786 (1998).