

ARG64967 anti-PRMT5 antibody

Package: 100 µg
Store at: -20°C

Summary

Product Description	Goat Polyclonal antibody recognizes PRMT5
Tested Reactivity	Hu
Predict Reactivity	Ms, Rat, Cow, Dog, Pig
Tested Application	WB
Specificity	This antibody is expected to recognize both isoforms (NP_006100.2; NP_001034708.1).
Host	Goat
Clonality	Polyclonal
Isotype	IgG
Target Name	PRMT5
Species	Human
Immunogen	RACREKDRDPEAQ
Conjugation	Un-conjugated
Alternate Names	IBP72; Protein arginine N-methyltransferase 5; EC 2.1.1.125; EC 2.1.1.-; Shk1 kinase-binding protein 1 homolog; HRMT1L5; 72 kDa ICln-binding protein; Histone-arginine N-methyltransferase PRMT5; Jak-binding protein 1; SKB1; SKB1Hs; JBP1; SKB1 homolog

Application Instructions

Application table	Application	Dilution
	WB	1 - 3 µg/ml
Application Note	WB: Recommend incubate at RT for 1h. * The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.	

Properties

Form	Liquid
Purification	Purified from goat serum by antigen affinity chromatography.
Buffer	Tris saline (pH 7.3), 0.02% Sodium azide and 0.5% BSA.
Preservative	0.02% Sodium azide
Stabilizer	0.5% BSA
Concentration	0.5 mg/ml
Storage instruction	For continuous use, store undiluted antibody at 2-8°C for up to a week. For long-term storage, aliquot and store at -20°C or below. Storage in frost free freezers is not recommended. Avoid repeated freeze/thaw cycles. Suggest spin the vial prior to opening. The antibody solution should be gently mixed

before use.

Note

For laboratory research only, not for drug, diagnostic or other use.

Bioinformation

Database links

[GeneID: 10419 Human](#)

[Swiss-port # O14744 Human](#)

Gene Symbol

PRMT5

Gene Full Name

protein arginine methyltransferase 5

Background

This gene encodes an enzyme that belongs to the methyltransferase family. The encoded protein catalyzes the transfer of methyl groups to the amino acid arginine, in target proteins that include histones, transcriptional elongation factors and the tumor suppressor p53. This gene plays a role in several cellular processes, including transcriptional regulation, and the assembly of small nuclear ribonucleoproteins. A pseudogene of this gene has been defined on chromosome 4. Alternative splicing results in multiple transcript variants encoding different isoforms. [provided by RefSeq, Sep 2015]

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. Methylates SUPT5H. Mono- and dimethylates arginine residues of myelin basic protein (MBP) in vitro. Plays a role in the assembly of snRNP core particles. May play a role in cytokine-activated transduction pathways. Negatively regulates cyclin E1 promoter activity and cellular proliferation. May regulate the SUPT5H transcriptional elongation properties. May be part of a pathway that is connected to a chloride current, possibly through cytoskeletal rearrangement. Methylates histone H2A and H4 'Arg-3' during germ cell development. Methylates histone H3 'Arg-8', which may repress transcription. Methylates the Piwi proteins (PIWIL1, PIWIL2 and PIWIL4), methylation of Piwi proteins being required for the interaction with Tudor domain-containing proteins and subsequent localization to the meiotic nuage. Methylates RPS10. Attenuates EGF signaling through the MAPK1/MAPK3 pathway acting at 2 levels. First, monomethylates EGFR; this enhances EGFR 'Tyr-1197' phosphorylation and PTPN6 recruitment, eventually leading to reduced SOS1 phosphorylation. Second, methylates RAF1 and probably BRAF, hence destabilizing these 2 signaling proteins and reducing their catalytic activity. Required for induction of E-selectin and VCAM-1, on the endothelial cells surface at sites of inflammation. Methylates HOXA9. Methylates and regulates SRGAP2 which is involved in cell migration and differentiation. Acts as a transcriptional corepressor in CRY1-mediated repression of the core circadian component PER1 by regulating the H4R3 dimethylation at the PER1 promoter. [UniProt]

Research Area

Gene Regulation antibody

Calculated Mw

73 kDa



ARG64967 anti-PRMT5 antibody WB image

Western Blot: Jurkat lysate (RIPA buffer, 35 µg total protein per lane) stained with ARG64967 anti-PRMT5 antibody at 2 µg/ml dilution.