

PRMT4/CARM1 Mouse mAb

CatalogNo: YM1215 Comparable Abs C

Key Features

Host Species

Mouse

Reactivity

Human, Mouse

Applications

WB,IP

MW

63kD (Observed)

Recommended Dilution Ratios

WB 1:200-1:500

Storage

Storage* -15°C to -25°C/1 year(Do not lower than -25°C)

Formulation Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.

Basic Information

Clonality Monoclonal

Immunogen Information

Immunogen Purified recombinant human PRMT4/CARM1 protein fragments expressed in E.coli.

Specificity This antibody detects endogenous levels of PRMT4/CARM1 and does not cross-react with

related proteins.

| Target Information

Gene name CARM1 PRMT4

Protein Name	Organism	Gene ID	UniProt ID	
	Human	<u>10498;</u>	Q86X55;	
	Mouse	<u>59035;</u>	Q9WVG6;	

Cellular Localization

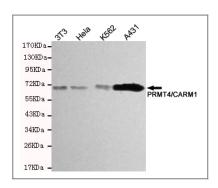
Nucleus . Cytoplasm . Mainly nuclear during the G1, S and G2 phases of the cell cycle (PubMed:19843527). Cytoplasmic during mitosis, after breakup of the nuclear membrane (PubMed:19843527). .

Tissue specificity Overexpressed in prostate adenocarcinomas and high-grade prostatic intraepithelial neoplasia.

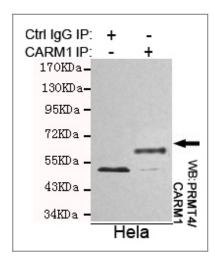
Function

Catalytic activity:S-adenosyl-L-methionine + histone-arginine = S-adenosyl-L-homocysteine + histone-N(omega)-methyl-arginine., Function: Methylates (mono- and asymmetric dimethylation) the quanidino nitrogens of arginyl residues in several proteins involved in DNA packaging, transcription regulation, and mRNA stability. Recruited to promoters upon gene activation together with histone acetyltransferases from EP300/P300 and p160 families, methylates histone H3 at 'Arg-17' and activates transcription via chromatin remodeling. During nuclear hormone receptor activation and TCF7L2/TCF4 activation, acts synergically with EP300/P300 and either one of the p160 histone acetyltransferases NCOA1/SRC1, NCOA2/GRIP1 and NCOA3/ACTR or CTNNB1/beta-catenin to activate transcription. During myogenic transcriptional activation, acts together with NCOA3/ACTR as a coactivator for MEF2C. During monocyte inflammatory stimulation, acts together with EP300/P300 as a coactivator for NF-kappa-B. Also seems to be involved in p53/TP53 transcriptional activation. Methylates EP300/P300, both at 'Arg-2142', which may loosen its interaction with NCOA2/GRIP1, and at 'Arg-580' and 'Arg-604' in the KIX domain, which impairs its interaction with CREB and inhibits CREB-dependent transcriptional activation. Also methylates arginine residues in RNA-binding proteins PABPC1, ELAVL1 and ELAV4, which may affect their mRNA-stabilizing properties and the half-life of their target mRNAs., miscellaneous: Methylation of H3-R17 by CARM1 is stimulated by preacetylation of H3-K18/H3-K23 by EP300 and blocked by citrullination of H3-R17 by PADI4., similarity: Belongs to the protein arginine N-methyltransferase family, subunit: Homodimer (Probable). Interacts with the C-terminus of NCOA2/GRIP1, NCO3/ACTR and NCOA1/SRC1. Part of a complex consisting of CARM1, EP300/P300 and NCOA2/GRIP1. Interacts with FLII, TP53, myogenic factor MEF2, EP300/P300, CREBBP and CTNNB1. Interacts with SNRPC (By similarity). Interacts with NR1H4. Interacts with RELA. Interacts with HTLV-1 Tax-1., tissue specificity: Overexpressed in prostate adenocarcinomas and high-grade prostatic intraepithelial neoplasia.,

Validation Data



Western blot detection of PRMT4/CARM1 in Hela, A431 and K562 cell lysates using PRMT4/CARM1 mouse mAb (1:200-1:500 diluted). Predicted band size:63KDa.Observed band size:63KDa.



Immunoprecipitation analysis of Hela cell lysates using PRMT4/CARM1 mouse mAb.

| Contact information

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Please scan the QR code to access additional product information:

PRMT4/CARM1 Mouse mAb

For Research Use Only. Not for Use in Diagnostic Procedures.

Antibody | ELISA Kits | Protein | Reagents