

Rabbit PRMT4 Polyclonal Antibody | anti-CARM1 antibody

PRMT4 Antibody

CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA31268	Rabbit	Human, Mouse, Rat Predicted Reactivity: Pig(100%), Zebrafish(88%), Bovine(88%), Horse(100%), Sheep(88%), Dog(100%), Xenopus(100%)	ELISA

PRODUCT SYNONYMS

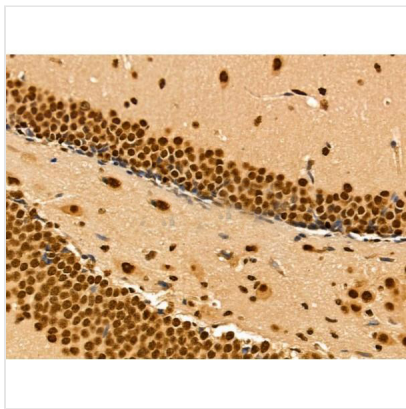
PRMT4; Polyclonal Antibody; PRMT4 Antibody; carm1; CARM1_HUMAN; Coactivator associated arginine methyltransferase 1; Coactivator-associated arginine methyltransferase 1; Histone arginine methyltransferase CARM 1; Histone arginine methyltransferase CARM1; Histone-arginine methyltransferase CARM1; PRMT 4; Protein arginine methyltransferase; Protein arginine N methyltransferase 4; Protein arginine N-methyltransferase 4; anti-CARM1 antibody

PRODUCT SPECIFICATIONS

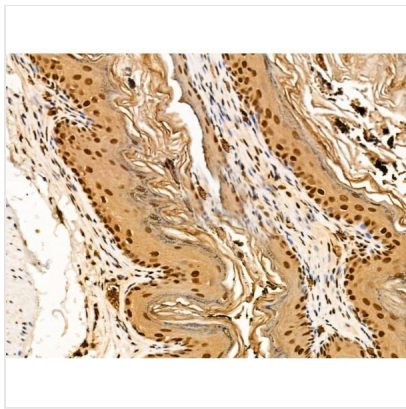
Host	Rabbit
Reactivity	Human, Mouse, Rat Predicted Reactivity: Pig(100%), Zebrafish(88%), Bovine(88%), Horse(100%), Sheep(88%), Dog(100%), Xenopus(100%)
Clonality	Polyclonal
Isotype	IgG
Specificity	PRMT4 Antibody detects endogenous levels of total PRMT4.
Purity/Purification	The antiserum was purified by peptide affinity chromatography using SulfoLink Coupling Resin (Thermo Fisher Scientific).
Form/Format	Liquid. Rabbit IgG in phosphate buffered saline, pH7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol
Concentration	1mg/ml (varies by lot)
Sequence Length	608
Applicable Applications for anti-CARM1 antibody	ELISA
Application Notes	WB: 1:500-1:2000 IHC: 1:50-1:200 ELISA(peptide): 1:20,000-1:40,000
Immunogen	A synthesized peptide derived from human PRMT4, corresponding to a region within the internal amino acids.
Fragment	Fab fragment
Preparation and Storage	Store at -20 degree C. Stable for 12 months from date of receipt.



IHC (Immunohistochemistry-Paraffin)
AAA31268 at 1/100 staining Mouse heart tissue by IHC-P. The sample was formaldehyde fixed and a heat mediated antigen retrieval step in citrate buffer was performed. The sample was then blocked and incubated with the primary antibody at 4Â°C overnight. An HRP conjugated anti-Rabbit antibody was used as the secondary antibody.



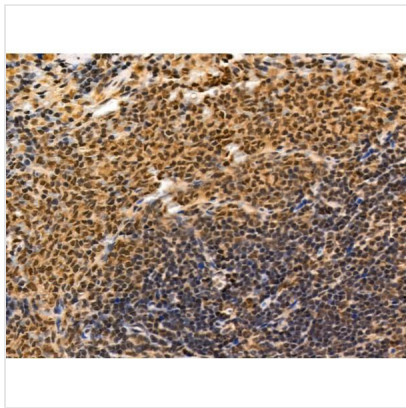
IHC (Immunohistochemistry-Paraffin)
AAA31268 at 1/100 staining Mouse brain tissue by IHC-P. The sample was formaldehyde fixed and a heat mediated antigen retrieval step in citrate buffer was performed. The sample was then blocked and incubated with the primary antibody at 4Â°C overnight. An HRP conjugated anti-Rabbit antibody was used as the secondary antibody.



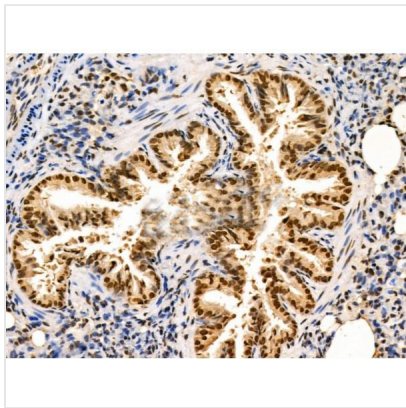
IHC (Immunohistochemistry-Paraffin)
AAA31268 at 1/100 staining Mouse stomach tissue by IHC-P. The sample was formaldehyde fixed and a heat mediated antigen retrieval step in citrate buffer was performed. The sample was then blocked and incubated with the primary antibody at 4Â°C overnight. An HRP conjugated anti-Rabbit antibody was used as the secondary antibody.



IHC (Immunohistochemistry-Paraffin)
AAA31268 at 1/100 staining Rat heart tissue by IHC-P. The sample was formaldehyde fixed and a heat mediated antigen retrieval step in citrate buffer was performed. The sample was then blocked and incubated with the primary antibody at 4Â°C overnight. An HRP conjugated anti-Rabbit antibody was used as the secondary antibody.



IHC (Immunohistochemistry-Paraffin)
AAA31268 at 1/100 staining Rat spleen tissue by IHC-P. The sample was formaldehyde fixed and a heat mediated antigen retrieval step in citrate buffer was performed. The sample was then blocked and incubated with the primary antibody at 4Â°C overnight. An HRP conjugated anti-Rabbit antibody was used as the secondary antibody.



IHC (Immunohistochemistry-Paraffin)
AAA31268 at 1/100 staining Rat lung tissue by IHC-P. The sample was formaldehyde fixed and a heat mediated antigen retrieval step in citrate buffer was performed. The sample was then blocked and incubated with the primary antibody at 4Â°C overnight. An HRP conjugated anti-Rabbit antibody was used as the secondary antibody.

ADDITIONAL INFORMATION

Related Product Information for anti-CARM1 antibody	Function: Methylates (mono- and asymmetric dimethylation) the guanidino nitrogens of arginyl residues in several proteins involved in DNA packaging, transcription regulation, pre-mRNA splicing, 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' (H3R17me), forming mainly asymmetric dimethylarginine (H3R17me2a), leading to activate 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. Acts as coactivator for PPARG, promotes adipocyte differentiation and the accumulation of brown fat tissue. Plays a role in the regulation of pre-mRNA alternative splicing by methylation of splicing factors. 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. Post Translational Modifications: Auto-methylated on Arg-550. Methylation enhances transcription coactivator activity. Methylation is required for its role in the regulation of pre-mRNA alternative splicing (By similarity).Phosphorylation at Ser-216 interferes with S-adenosyl-L-methionine binding and strongly reduces methyltransferase activity (By similarity). Phosphorylation at Ser-216 is strongly increased during mitosis, and decreases rapidly to a very low, basal level after entry into the G1 phase of the cell cycle. Phosphorylation at Ser-216 may promote location in the cytosol. Subcellular Location: Nucleus. Cytoplasm. Note: Mainly nuclear during the G1, S and G2 phases of the cell cycle. Cytoplasmic during mitosis, after breakup of the nuclear membrane. Tissue Specificity: Overexpressed in prostate adenocarcinomas and high-grade prostatic intraepithelial neoplasia. Subunit Structure: 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, TRIM24, CREBBP and CTNNB1. Identified in a complex containing CARM1, TRIM24 and NCOA2/GRIP1. Interacts with NCOA3/SRC3. Interacts with SNRPC (By similarity). Interacts with NR1H4. Interacts with RELA.(Microbial infection) Interacts with HTLV-1 protein Tax. Similarity: Belongs to the class I-like SAM-binding methyltransferase superfamily. Protein arginine N-methyltransferase family.
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NCBI AND UNIPROT INFORMATION

NCBI GI #	308153622
NCBI GeneID	10498
UniProt Accession #	Q86X55
Molecular Weight	Observed Molecular Weight: (Observed)65kD. Predicted Molecular Weight: (Calculated)66kDa.
NCBI Official Full Name	Histone-arginine methyltransferase CARM1
NCBI Official Synonym Full Names	coactivator associated arginine methyltransferase 1
NCBI Official Symbol	CARM1
NCBI Official Synonym Symbols	PRMT4
NCBI Protein Information	histone-arginine methyltransferase CARM1
UniProt Protein Name	Histone-arginine methyltransferase CARM1
UniProt Gene Name	CARM1

UniProt Synonym Gene Names	PRMT4
UniProt Entry Name	CARM1_HUMAN

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

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Online datasheet: <https://stage.aaabiotech.com/polyclonal/prmt4-antibody-elisa/31268>