

Mouse anti-Human, Mouse PRMT4/CARM1 Monoclonal Antibody | anti-CARM1 antibody

PRMT4/CARM1 Antibody

CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA290529	Mouse	Human, Mouse	Immunoprecipitation, Western Blot

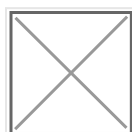
PRODUCT SYNONYMS

PRMT4/CARM1; Monoclonal Antibody; PRMT4/CARM1 Antibody; Purified Mouse Monoclonal Antibody (Mab); 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; PRMT4; Protein arginine methyltransferase; Protein arginine N methyltransferase 4; Protein arginine N-methyltransferase 4.; anti-CARM1 antibody

PRODUCT SPECIFICATIONS

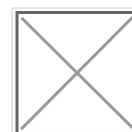
Host	Mouse
Reactivity	Human, Mouse
Clonality	Monoclonal
Form/Format	Purified mouse monoclonal in buffer containing 0.1M Tris-Glycine(pH 7.4,150 mM NaCl)with 0.2% sodium azide,0.1mg/mlBSA and 50% glycerol.
Sequence Length	608
Applicable Applications for anti-CARM1 antibody	IP (Immunoprecipitation), WB (Western Blot)
Antigen Source	Human
Antigen Type	Recombinant Protein
Preparation and Storage	Maintain refrigerated at 2-8 degree C for up to 6 months. For long term storage store at -20 degree C in small aliquots to prevent freeze-thaw cycles.

IMAGES



IP (Immunoprecipitation)

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



WB (Western Blot)

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.

ADDITIONAL INFORMATION

Related Product Information for anti-CARM1 antibody	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.
Product Categories/Family for anti-CARM1 antibody	Cancer; Cell Biology; Metabolism; Signal transduction
References	Grimwood J.,et al.Nature 428:529-535(2004). Mural R.J.,et al.Submitted (JUL-2005) to the EMBL/GenBank/DDBJ databases. Bechtel S.,et al.BMC Genomics 8:399-399(2007). Li H.,et al.J. Biol. Chem. 277:44623-44630(2002). Hong H.,et al.Cancer 101:83-89(2004).

NCBI AND UNIPROT INFORMATION

NCBI GI #	40288288
NCBI GeneID	10498
NCBI Accession #	NP_954592.1
NCBI GenBank Nucleotide #	NM_199141.1
UniProt Accession #	Q86X55; A6NN38
Molecular Weight	65854
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.