

Datasheet for ABIN753795

anti-CARM1 antibody (AA 411-510) (Biotin)

CARM1

CARM1 (CARM1 Products)



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Target:

Alternative Name:

Quantity:	100 μL		
Target:	CARM1		
Binding Specificity:	AA 411-510		
Reactivity:	Human, Mouse, Rat		
Host:	Rabbit		
Clonality:	Polyclonal		
Conjugate:	This CARM1 antibody is conjugated to Biotin		
Application:	Western Blotting (WB), ELISA, Immunohistochemistry (Paraffin-embedded Sections) (IHC (p)), Immunohistochemistry (Frozen Sections) (IHC (fro))		
Product Details			
Immunogen:	KLH conjugated synthetic peptide derived from human CARM1		
Isotype:	IgG		
Cross-Reactivity:	Human, Mouse, Rat		
Predicted Reactivity:	Dog,Cow,Pig		
Purification:	Purified by Protein A.		
Target Details			

Background:

Synonyms: PRMT4, Histone-arginine methyltransferase CARM1, Coactivator-associated arginine methyltransferase 1, Protein arginine N-methyltransferase 4, CARM1 Background: Methylates (mono- and asymmetric dimethylation) the guanidino nitrogens of arginyl residues in several proteins involved in DNA packaging, transcription regulation, premRNA 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.

Gene ID:

10498

UniProt:

Q86X55

Pathways:

Intracellular Steroid Hormone Receptor Signaling Pathway, Regulation of Intracellular Steroid
Hormone Receptor Signaling, Regulation of Lipid Metabolism by PPARalpha, Regulation of
Muscle Cell Differentiation, Skeletal Muscle Fiber Development, Positive Regulation of fat Cell
Differentiation

Application Details

Application Notes:

WB 1:300-5000

IHC-P 1:200-400

IHC-F 1:100-500

Restrictions:

For Research Use only

Handling

Format:	Liquid
Concentration:	1 μg/μL
Buffer:	Aqueous buffered solution containing 0.01M TBS (pH 7.4) with 1 % BSA, 0.03 % Proclin300 and 50 % Glycerol.
Preservative:	ProClin
Precaution of Use:	This product contains ProClin: a POISONOUS AND HAZARDOUS SUBSTANCE, which should be handled by trained staff only.
Storage:	-20 °C
Storage Comment:	Store at -20°C for 12 months.
Expiry Date:	12 months