

Datasheet for ABIN6241827

anti-CARM1 antibody[Go to Product page](#)**2** Images

Overview

Quantity:	100 µL
Target:	CARM1
Reactivity:	Human, Mouse
Host:	Mouse
Clonality:	Monoclonal
Conjugate:	This CARM1 antibody is un-conjugated
Application:	Western Blotting (WB), Immunoprecipitation (IP)

Product Details

Immunogen:	Recombinant Protein
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Target Details

Target:	CARM1
Alternative Name:	PRMT4/CARM1 (CARM1 Products)
Background:	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

Target Details

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.

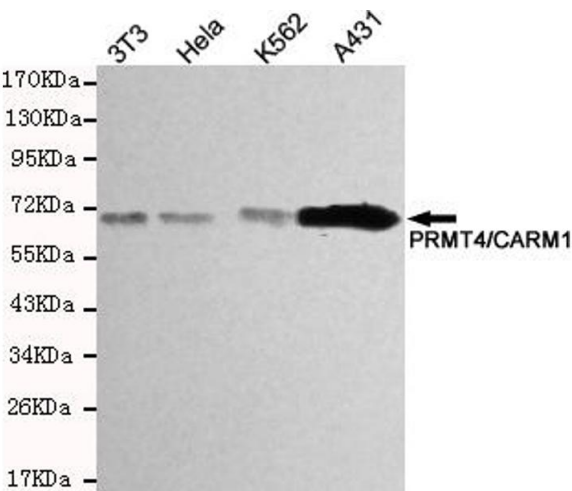
UniProt:	Q86X55
Pathways:	Intracellular Steroid Hormone Receptor Signaling Pathway , Regulation of Intracellular Steroid Hormone Receptor Signaling , Regulation of Lipid Metabolism by PPARalpha , Regulation of Muscle Cell Differentiation , Skeletal Muscle Fiber Development , Positive Regulation of fat Cell Differentiation

Application Details

Application Notes:	IP: 1:500. WB: 1:200-1:500
Restrictions:	For Research Use only

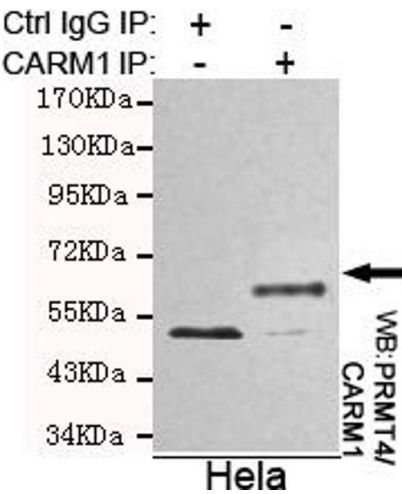
Handling

Format:	Liquid
Storage:	4 °C,-20 °C



Western Blotting

Image 1. 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

Image 2. Immunoprecipitation analysis of HeLa cell lysates using PRMT4/CARM1 mouse mAb.