Datasheet for ABIN6241827

anti-CARM1 antibody

2 Images

Go to Product page

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

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

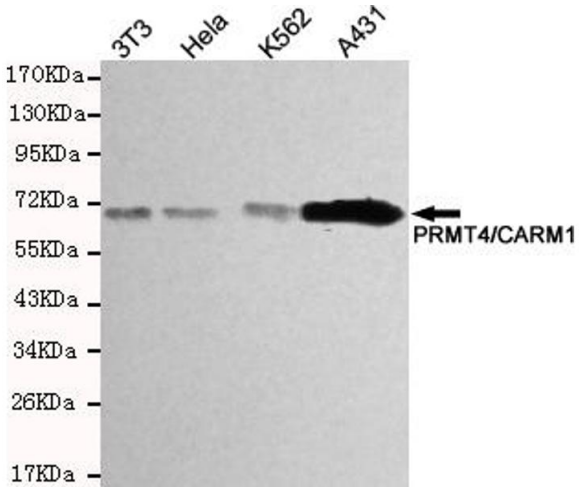
	activate transcription. During myogenic transcriptional activation, acts together with NCOA3/ACTR as a coactivator for MEF2C. During monocyte inflammatory stimulation, acts together with EP300/P300 as a coactivator for NF-kappa-B. Acts as coactivator for PPARG, promotes adipocyte differentiation and 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

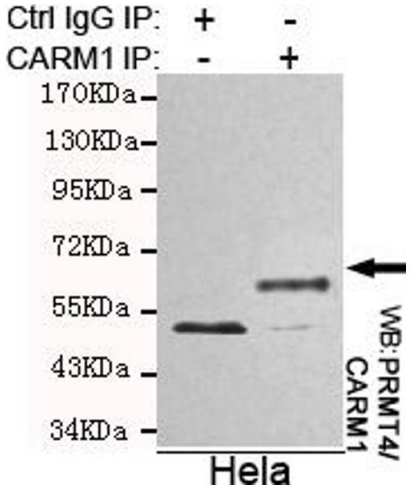
Handling

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.

