

Product datasheet

Anti-CARM1 antibody - C-terminal ab229484

2 Images

Overview

Product name	Anti-CARM1 antibody - C-terminal
Description	Rabbit polyclonal to CARM1 - C-terminal
Host species	Rabbit
Tested applications	Suitable for: IHC-P, WB
Species reactivity	Reacts with: Human Predicted to work with: Mouse, Rat, Xenopus laevis, Zebrafish 
Immunogen	Recombinant fragment within Human CARM1 (C terminal). The exact sequence is proprietary. Database link: Q86X55
Positive control	IHC-P: Human breast cancer tissue. WB: HepG2 whole cell lysate.

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C long term. Avoid freeze / thaw cycle.
Storage buffer	pH: 7.00 Preservative: 0.01% Thimerosal (merthiolate) Constituents: PBS, 20% Glycerol
Purity	Immunogen affinity purified
Clonality	Polyclonal
Isotype	IgG

Applications

Our [Abpromise guarantee](#) covers the use of **ab229484** in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
IHC-P		1/100 - 1/1000.

Application	Abreviews	Notes
WB		1/500 - 1/3000. Predicted molecular weight: 65 kDa.

Target

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.

Tissue specificity

Overexpressed in prostate adenocarcinomas and high-grade prostatic intraepithelial neoplasia.

Sequence similarities

Belongs to the protein arginine N-methyltransferase family.

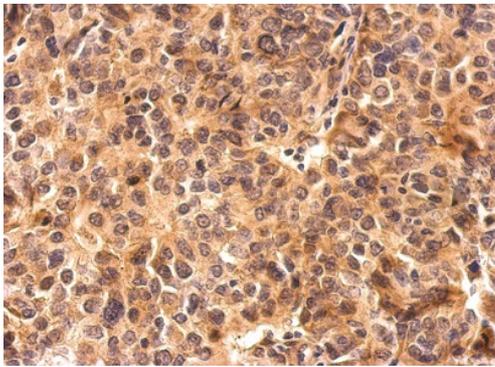
Post-translational modifications

Auto-methylated on Arg-550. Methylation enhances transcription coactivator activity. Methylation is required for its role in the regulation of pre-mRNA alternative splicing. 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.

Cellular localization

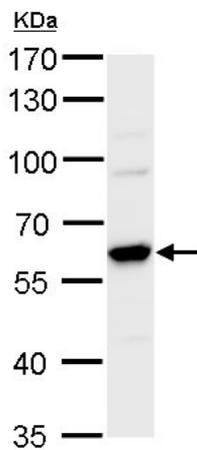
Nucleus. Cytoplasm. Mainly nuclear during the G1, S and G2 phases of the cell cycle. Cytoplasmic during mitosis, after breakup of the nuclear membrane.

Images



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-CARM1 antibody - C-terminal (ab229484)

Paraffin-embedded human breast cancer tissue stained for CARM1 using ab229484 at 1/500 dilution in immunohistochemical analysis.



Western blot - Anti-CARM1 antibody - C-terminal (ab229484)

Anti-CARM1 antibody - C-terminal (ab229484) at 1/1000 dilution + HepG2 (human liver hepatocellular carcinoma cell line) whole cell lysate at 30 μ g

Predicted band size: 65 kDa

7.5 % SDS-PAGE gel.

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