9853 Pacific Heights Blvd.
Suite D. San Diego,
CA 92121, USA
Tel: 858-263-4982
Email: info@abeomics.com

35-1298: Polyclonal Antibody to CARM1(Phospho-Ser228)

Clonality :	Polyclonal
Application :	WB,IF
Reactivity :	Human,Mouse,Rat
Gene :	CARM1
Gene ID :	10498
Uniprot ID :	Q86X55
Format :	Purified
Alternative Name :	PRMT4
Isotype :	Rabbit IgG
Immunogen Information :	Peptide sequence around phosphorylation site of serine 228(V-K-S(p)-N-N) derived from Human CARM1.

Description

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 Info

Amount :	50 µl / 100 µl
Content :	Supplied at 1.0mg/mL in phosphate buffered saline (without Mg2+ and Ca2+), pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.
Storage condition :	Store the antibody at 4°C, stable for 6 months. For long-term storage, store at -20°C. Avoid repeated freeze and thaw cycles.

Application Note

Predicted MW: 63kd, Western blotting: 1:500~1:1000, Immunofluorescence: 1:100~1:200

9853 Pacific Heights Blvd.
Suite D. San Diego,
CA 92121, USA
Tel: 858-263-4982
Email: info@abeomics.com

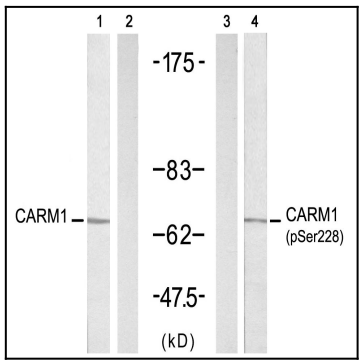

Figure 1: Western blot analysis of extracts from A431 cells untreated or treated with EGF (200ng/ml, 5min), using CARM1 (Ab-228) antibody (35-1650 , Line 1 and 2) and CARM1 (Phospho-Ser228) antibody (35-1298 , Line 3 and 4).

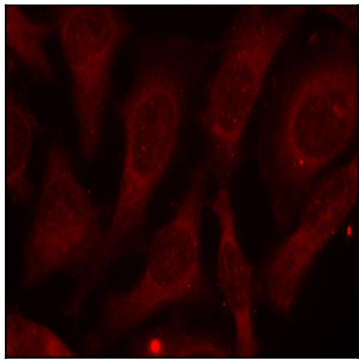

Figure 2: Immunofluorescence staining of methanol-fixed HeLa cells using CARM1 (Phospho-Ser228) antibody (35-1298 , Red).