

35-1650: Polyclonal Antibody to CARM1 (Ab-228)

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 aa.226~230 (V-K-S-N-N) derived from CARM1

Description

Methylates (mono- and asymmetric dimethylation) the guanidino nitrogens of arginyl residues in several proteins involved in DNA packaging, transcription regulation, 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' and activates 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. 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 Mg ²⁺ and Ca ²⁺), 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

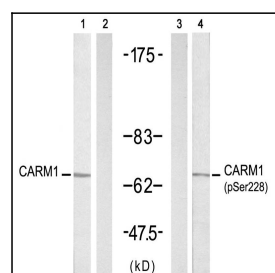


Figure 1: Western blot analysis of extracts from A431 cells untreated or treated with EGF(200ng/ml, 5min), using CARM1(Ab-228) antibody(35-1650 , Line 1 and 2) and CARM1(Phospho-Ser228) antibody(35-1298 , Line 3 and 4).

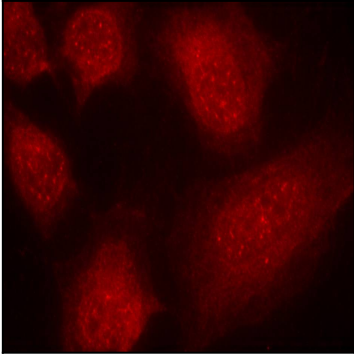


Figure 2: Immunofluorescence staining of methanol-fixed HeLa cells using CARM1(Ab-228) antibody(35-1650 , Red).