

CARM1 Antibody

Catalog No: #21331



Package Size: #21331-1 50ul #21331-2 100ul

Orders: order@signalwayantibody.com

Support: tech@signalwayantibody.com

Description

Product Name	CARM1 Antibody
Host Species	Rabbit
Clonality	Polyclonal
Purification	Antibodies were produced by immunizing rabbits with synthetic peptide and KLH conjugates. Antibodies were purified by affinity-chromatography using epitope-specific peptide.
Applications	WB IF
Species Reactivity	Human;Mouse;Rat
Specificity	The antibody detects endogenous levels of total CARM1 protein.
Immunogen Type	Peptide-KLH
Immunogen Description	Peptide sequence around aa.226~230 (V-K-S-N-N) derived from CARM1
Conjugates	Unconjugated
Target Name	CARM1
Other Names	PRMT4
Accession No.	Swiss-Prot: Q86X55NCBI Protein: NP_954592.1
Concentration	1.0mg/ml
Formulation	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	Store at -20°C for long term preservation (recommended). Store at 4°C for short term use.

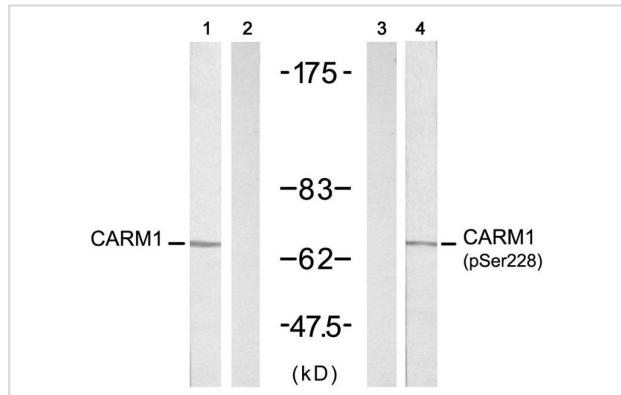
Application Details

Predicted MW: 63kd

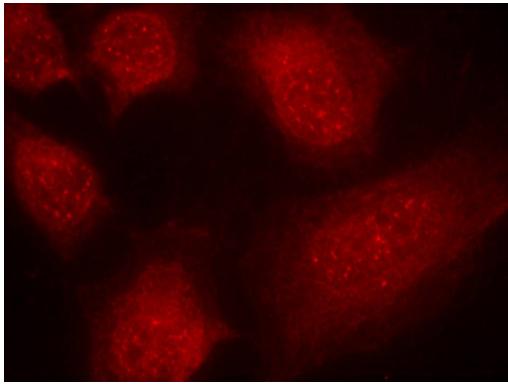
Western blotting: 1:500~1:1000

Immunofluorescence: 1:100~1:200

Images



Western blot analysis of extracts from A431 cells untreated or treated with EGF(200ng/ml, 5min), using CARM1(Ab-228) antibody(#21331, Line 1 and 2) and CARM1(Phospho-Ser228) antibody(#11331, Line 3 and 4).



Immunofluorescence staining of methanol-fixed HeLa cells using CARM1(Ab-228) antibody (#21331, Red).

Background

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.

Selma El Messaoudi, et al. (2006) Proc Natl Acad Sci U S A; 103(36): 13351

Note: This product is for in vitro research use only and is not intended for use in humans or animals.