

For Research Use Only

# CARM1 Polyclonal antibody

Catalog Number: 55246-1-AP

Featured Product

10 Publications



## Basic Information

<b>Catalog Number:</b> 55246-1-AP	<b>GenBank Accession Number:</b> NM_199141	<b>Purification Method:</b> Antigen affinity purification
<b>Size:</b> 150ul, Concentration: 273 µg/ml by Bradford method using BSA as the standard;	<b>GeneID (NCBI):</b> 10498	<b>Recommended Dilutions:</b> IHC 1:50-1:500 IF 1:20-1:200
<b>Source:</b> Rabbit	<b>Full Name:</b> coactivator-associated arginine methyltransferase 1	
<b>Isotype:</b> IgG	<b>Calculated MW:</b> 66 kDa	
	<b>Observed MW:</b> 63-66 kDa, 55 kDa	

## Applications

### Tested Applications:

IF, IHC, ELISA

### Cited Applications:

CoIP, IF, IHC, IP, WB

### Species Specificity:

human, mouse, rat, monkey

### Cited Species:

human, mouse

**Note-IHC: suggested antigen retrieval with TE buffer pH 9.0; (\*) Alternatively, antigen retrieval may be performed with citrate buffer pH 6.0**

### Positive Controls:

IHC : human breast cancer tissue, human cervical cancer tissue, human malignant melanoma tissue

IF : NIH/3T3 cells,

## Background Information

CARM1, also named as PRMT4, belongs to the protein arginine N-methyltransferase family. It is a dual functional coregulator that facilitates transcription initiation by methylation of Arg17 and Arg26 of histone H3 and also dictates the subsequent coactivator complex disassembly by methylation of the steroid receptor coactivator family coactivators and p300/cAMP-response element-binding protein. CARM1 functions as a coactivator for many nuclear receptors, such as oestrogen receptor, androgen receptor, thyroid receptor and farnesoid X-receptor. It also coactivates other transcription factors such as myocyte enhancer factor 2C (MEF2C), β-catenin, p53, nuclear factor (NF)-κB and the cAMP-responsive element-binding factor. The enzymatic activity and coactivator function of CARM1 has been found to be inactivated through phosphorylation at a conserved serine residue at mitosis stage. This antibody was generated against a synthetic peptide corresponding to a fragment of human CARM1. It is expected to specifically recognize the CARM1. In certain type of cells, like HeLa, double bands can be detected with this antibody. This may be due to the additional PTM sites in cells themselves.

## Notable Publications

Author	Pubmed ID	Journal	Application
Limei Ji	34455779	J Med Chem	WB
Guixin Wu	35557817	RSC Adv	WB
Cheng Wang	35623249	Eur J Med Chem	WB

## Storage

### Storage:

Store at -20°C.

### Storage Buffer:

PBS with 0.02% sodium azide and 50% glycerol pH 7.3.

Aliquoting is unnecessary for -20°C storage

\*\*\* 20ul sizes contain 0.1% BSA

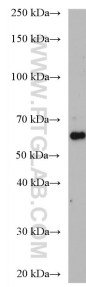
For technical support and original validation data for this product please contact:

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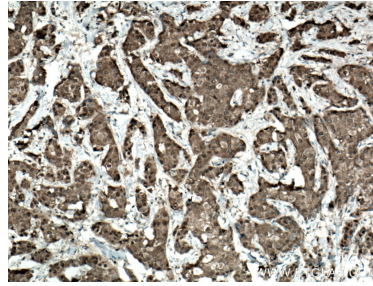
E: proteintech@ptglab.com  
W: ptglab.com

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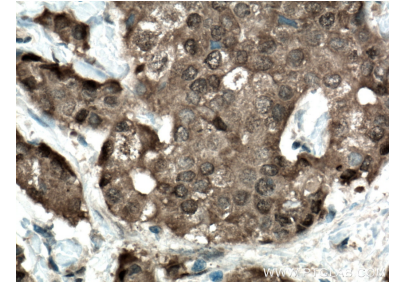
## Selected Validation Data



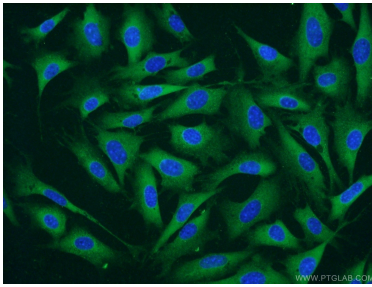
NIH/3T3 cells were subjected to SDS PAGE followed by western blot with 55246-1-AP (CARM1 antibody) at dilution of 1:1000 incubated at room temperature for 1.5 hours.



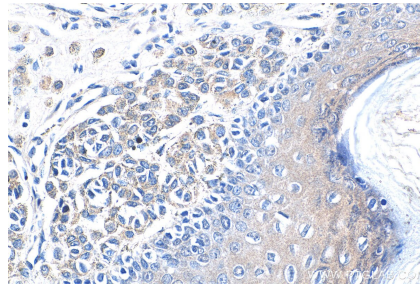
Immunohistochemical analysis of paraffin-embedded human breast cancer tissue slide using 55246-1-AP (CARM1 antibody) at dilution of 1:200 (under 10x lens. Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunohistochemical analysis of paraffin-embedded human breast cancer tissue slide using 55246-1-AP (CARM1 antibody) at dilution of 1:200 (under 40x lens. Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunofluorescent analysis of NIH/3T3 cells using 55246-1-AP (CARM1 antibody) at dilution of 1:50 and Alexa Fluor 488-conjugated AffiniPure Goat Anti-Rabbit IgG(H+L).



Immunohistochemical analysis of paraffin-embedded human malignant melanoma tissue slide using 55246-1-AP (CARM1 antibody) at dilution of 1:200 (under 40x lens).