### For Research Use Only

# CARM1 Polyclonal antibody

Catalog Number: 55246-1-AP

Featured Product 12 Publications



**Basic Information** 

Catalog Number: 55246-1-AP

Size: 500 ug/ml Source: Rabbit

Isotype:

66 kDa Observed MW: 63-66 kDa, 55 kDa

GenBank Accession Number:

NM\_199141 GeneID (NCBI): 10498 **UNIPROT ID:** Q86X55

coactivator-associated arginine methyltransferase 1

Calculated MW:

Full Name:

Positive Controls:

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

**Purification Method:** 

IHC 1:50-1:500 IF/ICC 1:20-1:200

Antigen affinity purification

Recommended Dilutions:

IF/ICC: NIH/3T3 cells,

**Applications** 

**Tested Applications:** IHC, IF/ICC, ELISA Cited Applications: WB, IHC, IF, IP, CoIP 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

## **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), \ \beta \ -catenin, \ p53, \ nuclear \ factor \ part \$ (NF)-kB 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 CRAM1. In certain type of cells, like Hela, double bands can be detected with this antibody. This may 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. Stable for one year after shipment.

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

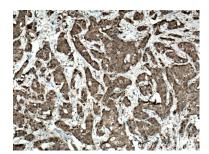
Aliquoting is unnecessary for -20°C storage

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

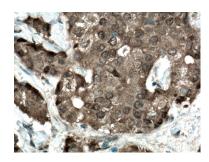
T: 4006900926 E: Proteintech-CN@ptglab.com W: ptgcn.com

This product is exclusively available under Proteintech Group brand and is not available to purchase from any other manufacturer.

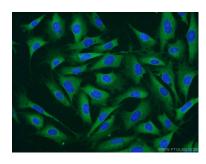
## **Selected Validation Data**



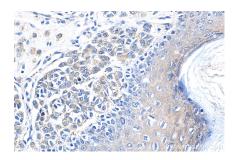
Immunohistochemical analysis of paraffinembedded human breast cancer tissue slide using 55246-1-AP (CARM1 antibody) at dilution of 1:200 (under 10x lens. Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



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