

## Anti-PRMT4/CARM1 Antibody Picoband®

Catalog Number: PA2263

### About CARM1

CARM1 (coactivator-associated arginine methyltransferase 1), also known as PRMT4, is an enzyme encoded by the CARM1 gene found in human beings, as well as many other mammals. This gene is mapped to 19p13.2. CARM1 is a regulator of cyclin E1 and DHFR mRNA expression. Its main function includes catalyzing the transfer of a methyl group from S-adenosyl-L-methionine to the side chain nitrogens of arginine residues within proteins to form methylated arginine derivatives and S-adenosyl-L-homocysteine. CARM1 is a secondary coactivator through its association with p160 family (SRC-1, GRIP1, AIB) of coactivators. It is responsible for moving cells toward the inner cell mass in developing blastocysts. This gene also plays an important role in androgen receptors and may play a role in prostate cancer progression.

### Overview

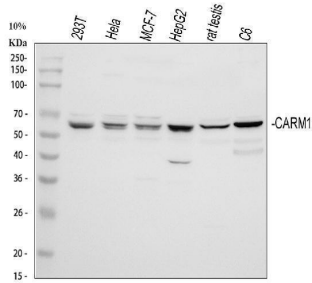
|                      |  |
|----------------------|--|
| Product Name         | Anti-PRMT4/CARM1 Antibody Picoband®  |
| Reactive Species     | Human, Rat   |
| Description          | Boster Bio Anti-PRMT4/CARM1 Antibody catalog # PA2263. Tested in Flow Cytometry, IF, ICC, WB applications. This antibody reacts with Human, Rat. The brand Picoband indicates this is a premium antibody that guarantees superior quality, high affinity, and strong signals with minimal background in Western blot applications. Only our best-performing antibodies are designated as Picoband, ensuring unmatched performance. |
| Application          | Flow Cytometry, IF, ICC, WB  |
| Clonality            | Polyclonal   |
| Formulation          | Each vial contains 4 mg Trehalose, 0.9 mg NaCl and 0.2 mg Na <sub>2</sub> HPO <sub>4</sub> .   |
| Storage Instructions | Store at -20°C for one year from date of receipt. After reconstitution, at 4°C for one month. It can also be aliquotted and stored frozen at -20°C for six months. Avoid repeated freeze-thaw cycles.  |
| Host                 | Rabbit   |
| Uniprot ID           | Q86X55   |

### Technical Details

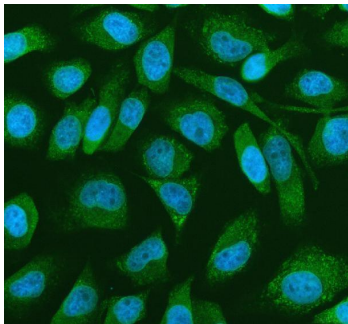
|                               |   |
|-------------------------------|---|
| Immunogen                     | A synthetic peptide corresponding to a sequence in the middle region of human PRMT4, identical to the related mouse and rat sequences.  |
| Recommended Detection Systems | Boster recommends Enhanced Chemiluminescent Kit with anti-Rabbit IgG (EK1002) for Western blot, and HRP Conjugated anti-Rabbit IgG Super Vision Assay Kit (SV0002-1) for ICC. |
| Cross Reactivity              | No cross-reactivity with other proteins   |
| Isotype                       | Rabbit IgG  |

|                     |  |
|---------------------|--|
| Form                | Lyophilized  |
| Concentration       | Adding 0.2 ml of distilled water will yield a concentration of 500 ug/ml.  |
| Purification        | Immunogen affinity purified.   |
| Suggested Dilutions | Western blot, 0.1-0.5ug/ml, Human, Rat<br>Immunocytochemistry/Immunofluorescence, 5 ug/ml, Human<br>Flow Cytometry(Fixed), 1-3 ug/1x10 <sup>6</sup> cells, Human |

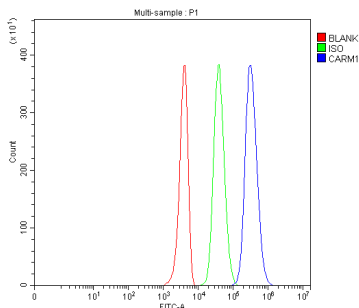
## Anti-PRMT4/CARM1 Antibody Picoband® (PA2263) Images



Western blot analysis of PRMT4/CARM1 using anti-PRMT4/CARM1 antibody (PA2263). Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel) / 90V (Resolving gel) for 2-3 hours. The sample well of each lane was loaded with 30 ug of sample under reducing conditions. Lane 1: human 293T whole cell lysates, Lane 2: human Hela whole cell lysates, Lane 3: human MCF-7 whole cell lysates, Lane 4: human HepG2 whole cell lysates, Lane 5: rat testis tissue lysates, Lane 6: rat C6 whole cell lysates. After electrophoresis, proteins were transferred to a nitrocellulose membrane at 150 mA for 50-90 minutes. Blocked the membrane with 5% non-fat milk/TBS for 1.5 hour at RT. The membrane was incubated with rabbit anti-PRMT4/CARM1 antigen affinity purified polyclonal antibody (Catalog # PA2263) at 0.5 ug/mL overnight at 4°C, then washed with TBS-0.1%Tween 3 times with 5 minutes each and probed with a goat anti-rabbit IgG-HRP secondary antibody at a dilution of 1:5000 for 1.5 hour at RT. The signal is developed using an Enhanced Chemiluminescent detection (ECL) kit (Catalog # EK1002) with Tanon 5200 system. A specific band was detected for PRMT4/CARM1 at approximately 66 kDa. The expected band size for PRMT4/CARM1 is at 66 kDa.



IF analysis of PRMT4/CARM1 using anti-PRMT4/CARM1 antibody (PA2263). PRMT4/CARM1 was detected in an immunocytochemical section of Hela cells. Enzyme antigen retrieval was performed using IHC enzyme antigen retrieval reagent (AR0022) for 15 mins. The cells were blocked with 10% goat serum. And then incubated with 5 ug/mL rabbit anti-PRMT4/CARM1 Antibody (PA2263) overnight at 4°C. DyLight®488 Conjugated Goat Anti-Rabbit IgG (BA1127) was used as secondary antibody at 1:500 dilution and incubated for 30 minutes at 37°C. The section was counterstained with DAPI. Visualize using a fluorescence microscope and filter sets appropriate for the label used.



Flow Cytometry analysis of 293T cells using anti-PRMT4/CARM1 antibody (PA2263). Overlay histogram showing 293T cells stained with PA2263 (Blue line). To facilitate intracellular staining, cells were fixed with 4% paraformaldehyde and permeabilized with permeabilization buffer. The cells were blocked with 10% normal goat serum. And then incubated with rabbit anti-PRMT4/CARM1 Antibody (PA2263, 1 ug/1x10<sup>6</sup> cells) for 30 min at 20°C. DyLight®488 conjugated goat anti-rabbit IgG (BA1127, 5-10 ug/1x10<sup>6</sup> cells) was used as secondary antibody for 30 minutes at 20°C. Isotype control antibody (Green line) was rabbit IgG (1 ug/1x10<sup>6</sup>) used under the same conditions. Unlabelled sample without incubation with primary antibody and secondary antibody (Red line) was used as a blank control.

## Submit a product review to Biocompare.com

Submit a review of this product to Biocompare.com to receive a \$20 Amazon.com giftcard! Your reviews help your fellow scientists make the right decisions. Thank you for your contribution.



Anti-PRMT4/CARM1 Antibody

For Research Use Only. Not for use in diagnostic procedures.