

Rabbit anti-Human, Mouse Carbonic Anhydrase 9/CA9 Polyclonal Antibody | anti-CA9 antibody

Anti-Carbonic Anhydrase 9/CA9 Antibody Picoband

CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA19418	Rabbit	Human, Mouse	Western Blot, Immunohistochemistry, Flow Cytometry, Functional Assay, ELISA

PRODUCT SYNONYMS

Carbonic Anhydrase 9/CA9; Polyclonal Antibody; Anti-Carbonic Anhydrase 9/CA9 Antibody Picoband; anti-CA9 antibody

PRODUCT SPECIFICATIONS

Host	Rabbit
Reactivity	Human, Mouse
Clonality	Polyclonal
Isotype	Rabbit IgG
Specificity	Natural and recombinant Human CCL14
Purity/Purification	Immunogen affinity purified.
Form/Format	Lyophilized Each vial contains 4 mg Trehalose, 0.9 mg NaCl, 0.2 mg Na ₂ HPO ₄ .
Concentration	Adding 0.2 ml of distilled water will yield a concentration of 500 ug/ml. (varies by lot)
Applicable Applications for anti-CA9 antibody	WB (Western Blot), IHC (Immunohistochemistry), FCM/FACS (Flow Cytometry), ELISA
Application Notes	WB: 0.25-0.5 ug/ml, Human IHC-P: 2-5 ug/ml, Human, Mouse FC/FACS: 1-3 ug/1x10 ⁶ cells, Human, Mouse Direct ELISA: 0.1-0.5 ug/ml, Human Tested Species: In-house tested species with positive results. Enhanced Chemiluminescent Kit with anti-Rabbit IgG for Western blot, and HRP Conjugated anti-Rabbit IgG Super Vision Assay Kit for IHC(P).
Samples	Cell culture supernatants, serum and plasma (heparin, EDTA)
Detection Range	15.6 pg/ml - 1,000 pg/ml
Immunogen	E Coli-derived human Carbonic Anhydrase 9/CA9 recombinant protein (Position: D146-D414).
Preparation and Storage	Store at -20 degree C for one year from date of receipt. After reconstitution, at 4 degree C for one month. It can also be aliquotted and stored frozen at -20 degree C for six months. Avoid repeated freezing and thawing.



FCM (Flow Cytometry)

Figure 6. Flow Cytometry analysis of RAW264.7 cells using anti-Carbonic Anhydrase 9/CA9 antibody (AAA19418).Overlay histogram showing RAW264.7 cells stained with AAA19418 (Blue line). The cells were blocked with 10% normal goat serum. And then incubated with rabbit anti-Carbonic Anhydrase 9/CA9 Antibody (AAA19418, 1 ug/1x10⁶ cells) for 30 min at 20 degree C. DyLight488 conjugated goat anti-rabbit IgG was used as secondary antibody for 30 minutes at 20 degree C. Isotype control antibody (Green line) was rabbit IgG (1 ug/1x10⁶) used under the same conditions. Unlabelled sample (Red line) was also used as a control.



FCM (Flow Cytometry)

Figure 5. Flow Cytometry analysis of U87 cells using anti-Carbonic Anhydrase 9/CA9 antibody (AAA19418).Overlay histogram showing U87 cells stained with AAA19418 (Blue line). The cells were blocked with 10% normal goat serum. And then incubated with rabbit anti-Carbonic Anhydrase 9/CA9 Antibody (AAA19418, 1 ug/1x10⁶ cells) for 30 min at 20 degree C. DyLight488 conjugated goat anti-rabbit IgG was used as secondary antibody for 30 minutes at 20 degree C. Isotype control antibody (Green line) was rabbit IgG (1 ug/1x10⁶) used under the same conditions. Unlabelled sample (Red line) was also used as a control.



IHC (Immunohistochemistry)

Figure 4. IHC analysis of Carbonic Anhydrase 9/CA9 using anti-Carbonic Anhydrase 9/CA9 antibody (AAA19418).Carbonic Anhydrase 9/CA9 was detected in a paraffin-embedded section of mouse stomach tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH 8.0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 2 ug/ml rabbit anti-Carbonic Anhydrase 9/CA9 Antibody (AAA19418) overnight at 4 degree C. Peroxidase Conjugated Goat Anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37 degree C. The tissue section was developed using HRP Conjugated Rabbit IgG Super Vision Assay Kit with DAB as the chromogen.



IHC (Immunohistochemistry)

Figure 3. IHC analysis of Carbonic Anhydrase 9/CA9 using anti-Carbonic Anhydrase 9/CA9 antibody (AAA19418).Carbonic Anhydrase 9/CA9 was detected in a paraffin-embedded section of human renal adenocarcinoma tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH 8.0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 2 ug/ml rabbit anti-Carbonic Anhydrase 9/CA9 Antibody (AAA19418) overnight at 4 degree C. Peroxidase Conjugated Goat Anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37 degree C. The tissue section was developed using HRP Conjugated Rabbit IgG Super Vision Assay Kit with DAB as the chromogen.



IHC (Immunohistochemistry)

Figure 2. IHC analysis of Carbonic Anhydrase 9/CA9 using anti-Carbonic Anhydrase 9/CA9 antibody (AAA19418).Carbonic Anhydrase 9/CA9 was detected in a paraffin-embedded section of human colonic adenocarcinoma tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH 8.0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 2 ug/ml rabbit anti-Carbonic Anhydrase 9/CA9 Antibody (AAA19418) overnight at 4 degree C. Peroxidase Conjugated Goat Anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37 degree C. The tissue section was developed using HRP Conjugated Rabbit IgG Super Vision Assay Kit with DAB as the chromogen.



WB (Western Blot)

Figure 1. Western blot analysis of Carbonic Anhydrase 9/CA9 using anti-Carbonic Anhydrase 9/CA9 antibody (AAA19418).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 U-87MG whole cell lysates,Lane 2: human 293T whole cell lysates,Lane 3: human Hela 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-Carbonic Anhydrase 9/CA9 antigen affinity purified polyclonal antibody (#AAA19418) at 0.5 ug/mL overnight at 4 degree 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 with Tanon 5200 system. A specific band was detected for Carbonic Anhydrase 9/CA9 at approximately 54 kDa. The expected band size for Carbonic Anhydrase 9/CA9 is at 50 kDa.

ADDITIONAL INFORMATION

Related Product Information for anti-CA9 antibody	Background: Chemokine(C-C motif) ligand 14(CCL14) is a small cytokine belonging to the CC chemokine family. It is also commonly known as HCC-1. It is produced as a protein precursor that is processed to generate a mature active protein containing 74 amino acids that and is 46% identical in amino acid composition to CCL3 and CCL4. This chemokine is expressed in various tissues including spleen, bone marrow, liver, muscle, and gut. CCL14 activates monocytes, but does not induce their chemotaxis. In addition, HCC-1 enhanced the proliferation of CD34+ myeloid progenitor cells. It was as effective as MIP-1 alpha, but about 100-fold less potent. Human CCL14 is located on chromosome 17 within a cluster of other chemokines belonging to the CC family.
Product Categories/Family for anti-CA9 antibody	Primary Antibodies, Rabbit Polyclonal Antibodies

NCBI AND UNIPROT INFORMATION

NCBI GI #	119578763
NCBI GeneID	768
UniProt Accession #	Q16790; Q5T4R1
Molecular Weight	49,698 Da
NCBI Official Full Name	carbonic anhydrase IX
NCBI Official Synonym Full Names	carbonic anhydrase 9
NCBI Official Symbol	CA9
NCBI Official Synonym Symbols	MN; CAIX
NCBI Protein Information	carbonic anhydrase 9
UniProt Protein Name	Carbonic anhydrase 9
UniProt Gene Name	CA9
UniProt Synonym Gene Names	G250; MN; CA-IX; CAIX; RCC-associated antigen G250

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

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Online datasheet: <https://stage.aaabiotech.com/polyclonal/carbonic-anhydrase-9-ca9-antibody-western-blot-immunohistochemistry-flow-cytometry-elisa/19418>