

Mouse anti-Human Carbonic Anhydrase I/CA1 Monoclonal Antibody | anti-CA1 antibody

Anti-Carbonic Anhydrase I/CA1 Antibody (monoclonal, 2B5)

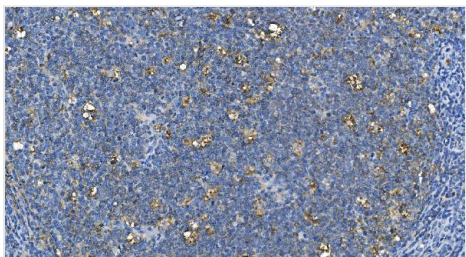
CATALOG # AAA19348	HOST Mouse	REACTIVITY Human	APPLICATIONS Western Blot, Immunohistochemistry
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PRODUCT SYNONYMS

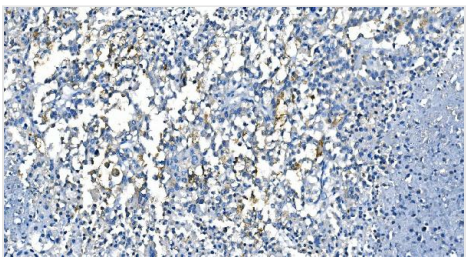
Carbonic Anhydrase I/CA1; Monoclonal Antibody; Anti-Carbonic Anhydrase I/CA1 Antibody (monoclonal; 2B5); CA1; Carbonic anhydrase 1; Carbonate dehydratase I; Carbonic anhydrase B; CAB; Carbonic anhydrase I; CA-I; carbonic anhydrase I; anti-CA1 antibody

PRODUCT SPECIFICATIONS

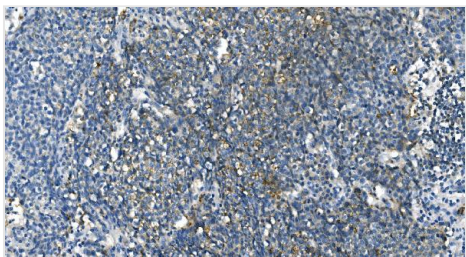
Host	Mouse
Reactivity	Human
Clonality	Monoclonal
Isotype	Mouse IgG1
Clone Number	2B5
Specificity	Mouse IgG monoclonal antibody for Carbonic Anhydrase I/CA1 detection.
Purity/Purification	Immunogen affinity purified.
Form/Format	Lyophilized. Each vial contains 4mg Trehalose, 0.9mg NaCl and 0.2mg Na2HPO4.
Applicable Applications for anti-CA1 antibody	WB (Western Blot), IHC (Immunohistochemistry)
Application Notes	WB: 0.25-0.5ug/ml Human IHC-P: 2-5ug/ml Human
Immunogen	E Coli-derived human CA1 recombinant protein (Position: D9-F261). Human CA1 shares 78. 5% and 81% amino acid (aa) sequence identity with mouse and rat CA1, respectively.
Reconstitution	Add 0.2ml of distilled water will yield a concentration of 500ug/ml.
Recommended Detection Systems	Recommended Detection Systems
Preparation and Storage	Store at -20 degree C for one year. After reconstitution, at 4 degree C for one month. It can also be aliquotted and stored frozen at -20 degree C for a longer time. Avoid repeated freezing and thawing.



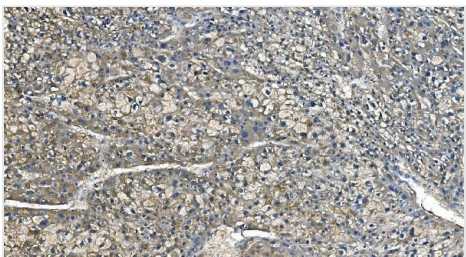
IHC (Immunohistochemistry)
Figure 7. IHC analysis of Carbonic Anhydrase I/CA1 using anti-Carbonic Anhydrase I/CA1 antibody (AAA19348).Carbonic Anhydrase I/CA1 was detected in paraffin-embedded section of human tonsil tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH8. 0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 2μg/ml mouse anti-Carbonic Anhydrase I/CA1 Antibody (AAA19348) overnight at 4 degree C. Biotinylated goat anti-mouse IgG was used as secondary antibody and incubated for 30 minutes at 37 degree C. The tissue section was developed using Strepavidin-Biotin-Complex (SABC) (Catalog # with DAB as the chromogen.



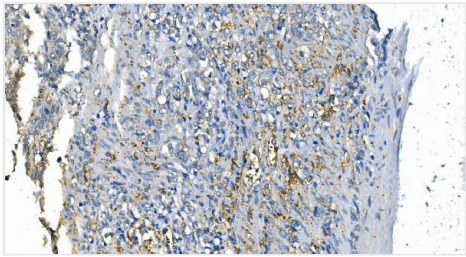
IHC (Immunohistochemistry)
Figure 6. IHC analysis of Carbonic Anhydrase I/CA1 using anti-Carbonic Anhydrase I/CA1 antibody (AAA19348).Carbonic Anhydrase I/CA1 was detected in paraffin-embedded section of human pancreatic cancer tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH8. 0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 2μg/ml mouse anti-Carbonic Anhydrase I/CA1 Antibody (AAA19348) overnight at 4 degree C. Biotinylated goat anti-mouse IgG was used as secondary antibody and incubated for 30 minutes at 37 degree C. The tissue section was developed using Strepavidin-Biotin-Complex (SABC) (Catalog # with DAB as the chromogen.



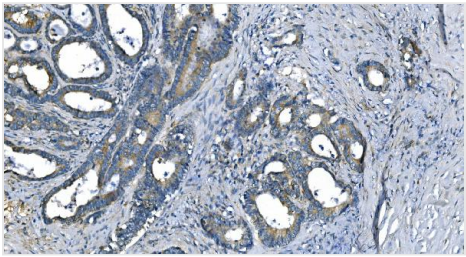
IHC (Immunohistochemistry)
Figure 5. IHC analysis of Carbonic Anhydrase I/CA1 using anti-Carbonic Anhydrase I/CA1 antibody (AAA19348).Carbonic Anhydrase I/CA1 was detected in paraffin-embedded section of human lung cancer tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH8. 0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 2μg/ml mouse anti-Carbonic Anhydrase I/CA1 Antibody (AAA19348) overnight at 4 degree C. Biotinylated goat anti-mouse IgG was used as secondary antibody and incubated for 30 minutes at 37 degree C. The tissue section was developed using Strepavidin-Biotin-Complex (SABC) (Catalog # with DAB as the chromogen.



IHC (Immunohistochemistry)
Figure 4. IHC analysis of Carbonic Anhydrase I/CA1 using anti-Carbonic Anhydrase I/CA1 antibody (AAA19348).Carbonic Anhydrase I/CA1 was detected in paraffin-embedded section of human liver cancer tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH8. 0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 2μg/ml mouse anti-Carbonic Anhydrase I/CA1 Antibody (AAA19348) overnight at 4 degree C. Biotinylated goat anti-mouse IgG was used as secondary antibody and incubated for 30 minutes at 37 degree C. The tissue section was developed using Strepavidin-Biotin-Complex (SABC) (Catalog # with DAB as the chromogen.



IHC (Immunohistochemistry)
Figure 3. IHC analysis of Carbonic Anhydrase I/CA1 using anti-Carbonic Anhydrase I/CA1 antibody (AAA19348).Carbonic Anhydrase I/CA1 was detected in paraffin-embedded section of human gastric cancer tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH8. 0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 2μg/ml mouse anti-Carbonic Anhydrase I/CA1 Antibody (AAA19348) overnight at 4 degree C. Biotinylated goat anti-mouse IgG was used as secondary antibody and incubated for 30 minutes at 37 degree C. The tissue section was developed using Strepavidin-Biotin-Complex (SABC) (Catalog # with DAB as the chromogen.



IHC (Immunohistochemistry)
Figure 2. IHC analysis of Carbonic Anhydrase I/CA1 using anti-Carbonic Anhydrase I/CA1 antibody (AAA19348).Carbonic Anhydrase I/CA1 was detected in paraffin-embedded section of human colon cancer tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH8. 0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 2μg/ml mouse anti-Carbonic Anhydrase I/CA1 Antibody (AAA19348) overnight at 4 degree C. Biotinylated goat anti-mouse IgG was used as secondary antibody and incubated for 30 minutes at 37 degree C. The tissue section was developed using Strepavidin-Biotin-Complex (SABC) (Catalog # with DAB as the chromogen.

ADDITIONAL INFORMATION

Related Product Information for anti-CA1 antibody	Carbonic anhydrase 1 is an enzyme that in humans is encoded by the CA1 gene. It is a member of the Carbonic anhydrase. The CA1 gene is mapped to 8q22. CAI has got about 260 amino acids. This protein is highly expressed in erythrocytes. As catalysts of the reversible hydration of carbon dioxide, CAI participates in a variety of biologic processes like respiration, calcification, acid-base balance etc.
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References	1. Lowe N, Edwards YH, Edwards M, Butterworth PH (Nov 1991). "Physical mapping of the human carbonic anhydrase gene cluster on chromosome 8". Genomics 10 (4): 882-8. 2. "Entrez Gene: CA1 carbonic anhydrase I".
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NCBI AND UNIPROT INFORMATION

NCBI GI #	192447430
NCBI GeneID	759
NCBI Accession #	NP_001122301.1
NCBI GenBank Nucleotide #	NM_001128829.2
UniProt Accession #	P00915
Molecular Weight	28,870 Da
NCBI Official Full Name	carbonic anhydrase 1
NCBI Official Synonym Full Names	carbonic anhydrase I
NCBI Official Symbol	CA1
NCBI Official Synonym Symbols	CAB; CA-I; Car1
NCBI Protein Information	carbonic anhydrase 1; carbonic anhydrase B; carbonic dehydratase; carbonate dehydratase I
UniProt Protein Name	Carbonic anhydrase 1
UniProt Gene Name	CA1
UniProt Synonym Gene Names	CAB; CA-I
UniProt Entry Name	CAH1_HUMAN

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.