

## Rabbit anti-Human Carbonic Anhydrase IX Monoclonal Antibody | anti-CA9 antibody

Recombinant Anti-Carbonic Anhydrase IX Antibody, Rabbit Monoclonal

|                               |                       |                            |                                                    |
|-------------------------------|-----------------------|----------------------------|----------------------------------------------------|
| CATALOG #<br><b>AAA254459</b> | HOST<br><b>Rabbit</b> | REACTIVITY<br><b>Human</b> | APPLICATIONS<br><b>Immunohistochemistry, ELISA</b> |
|-------------------------------|-----------------------|----------------------------|----------------------------------------------------|

### PRODUCT SYNONYMS

Carbonic Anhydrase IX; Monoclonal Antibody; Recombinant Anti-Carbonic Anhydrase IX Antibody; Rabbit Monoclonal; Carbonic Anhydrase IX/CA9 Antibody; Rabbit MAb; carbonic anhydrase IX; Anti-CAIX Antibody; Anti-Carbonic Anhydrase IX Antibody; Anti-MN Antibody; anti-CA9 antibody

### PRODUCT SPECIFICATIONS

|                                               |                                                                                                                                                                                                                                                                       |
|-----------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Host                                          | Rabbit                                                                                                                                                                                                                                                                |
| Reactivity                                    | Human                                                                                                                                                                                                                                                                 |
| Clonality                                     | Monoclonal                                                                                                                                                                                                                                                            |
| Isotype                                       | Rabbit IgG                                                                                                                                                                                                                                                            |
| Clone Number                                  | 005                                                                                                                                                                                                                                                                   |
| Specificity                                   | Human Carbonic Anhydrase IX/CA9                                                                                                                                                                                                                                       |
| Purity/Purification                           | Protein A                                                                                                                                                                                                                                                             |
| Form/Format                                   | Liquid; 0.2um filtered solution in PBS                                                                                                                                                                                                                                |
| Applicable Applications for anti-CA9 antibody | IHC (Immunohistochemistry), ELISA                                                                                                                                                                                                                                     |
| Antibody Type                                 | Recombinant Antibody                                                                                                                                                                                                                                                  |
| Immunogen                                     | Recombinant Human Carbonic Anhydrase IX/CA9 protein                                                                                                                                                                                                                   |
| Conjugation                                   | Unconjugated                                                                                                                                                                                                                                                          |
| Preparation                                   | This antibody was obtained from a rabbit immunized with purified, recombinant Human Carbonic Anhydrase IX/CA9 (rh Carbonic Anhydrase IX/CA9).                                                                                                                         |
| Preparation and Storage                       | This antibody can be stored at 2-8 degree C for one month without detectable loss of activity. Antibody products are stable for twelve months from date of receipt when stored at -20 degree C to -80 degree C. Preservative-Free. Avoid repeated freeze-thaw cycles. |

### IMAGES



#### IHC (Immunohistochemistry)

Immunochemical staining of human CA9 in human renal carcinoma with rabbit monoclonal antibody (1:200, formalin-fixed paraffin embedded sections).



#### IHC (Immunohistochemistry)

Immunochemical staining of human CA9 in human bladder carcinoma with rabbit monoclonal antibody (1:200, formalin-fixed paraffin embedded sections).

**IHC (Immunohistochemistry)**

Immunochemical staining of human CA9 in human gastric cancer with rabbit monoclonal antibody (1:500, formalin-fixed paraffin embedded sections).

**IHC (Immunohistochemistry)**

Immunochemical staining of human CA9 in human stomach with rabbit monoclonal antibody (1:500, formalin-fixed paraffin embedded sections).

**ADDITIONAL INFORMATION**

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| <b>Related Product Information for anti-CA9 antibody</b> | Carbonic anhydrases IX (CA IX), also known as membrane antigen MN or CA9, is a member of the carbonic anhydrase (CA) family and may be involved in cell proliferation and cellular transformation. CAs are zinc metalloenzymes that catalyze the reversible hydration of carbon dioxide ( $H_2O + CO_2 = H^+ + HCO_3^-$ ) and thus participate in a variety of biological and physical processes. CA IX protein is expressed primarily in carcinoma cells lines, and the expression is cell density dependent and has been shown to be strongly induced by hypoxia, accordingly facilitates adaptation of tumor cells to hypoxic conditions. It is involved in tumorigenesis through many pathways, such as pH regulation and cell adhesion control. CA IX is used as a marker of tumor hypoxia and as a new therapeutic target for many human carcinomas and cancers.              |
| <b>Product Categories/Family for anti-CA9 antibody</b>   | <a href="#">Cancer Drug Targets</a>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| <b>References</b>                                        | <p>Loncaster JA, et al. (2001) Carbonic anhydrase (CA IX) expression, a potential new intrinsic marker of hypoxia: correlations with tumor oxygen measurements and prognosis in locally advanced carcinoma of the cervix. <i>Cancer Res.</i> 61(17): 6394-9.</p> <p>Zvada J, et al. (2003) Soluble form of carbonic anhydrase IX (CA IX) in the serum and urine of renal carcinoma patients. <i>Br J Cancer.</i> 89(6): 1067-71.</p> <p>Pan P, et al. (2006) Carbonic anhydrase gene expression in CA II-deficient (Car2<sup>-/-</sup>) and CA IX-deficient (Car9<sup>-/-</sup>) mice. <i>J Physiol.</i> 571(Pt 2): 319-27.</p> <p>Zhou GX, et al. (2010) Quantification of carbonic anhydrase IX expression in serum and tissue of renal cell carcinoma patients using enzyme-linked immunosorbent assay: prognostic and diagnostic potentials. <i>Urology.</i> 75(2): 257-61.</p> |

**NCBI AND UNIPROT INFORMATION**

|                                         |                                                    |
|-----------------------------------------|----------------------------------------------------|
| <b>NCBI GI #</b>                        | <a href="#">169636420</a>                          |
| <b>NCBI GeneID</b>                      | <a href="#">768</a>                                |
| <b>NCBI Accession #</b>                 | <a href="#">NP_001207.2</a>                        |
| <b>NCBI GenBank Nucleotide #</b>        | <a href="#">NM_001216.2</a>                        |
| <b>UniProt Accession #</b>              | <a href="#">Q16790</a> ; <a href="#">Q5T4R1</a>    |
| <b>Molecular Weight</b>                 | 49698 MW                                           |
| <b>NCBI Official Full Name</b>          | carbonic anhydrase 9                               |
| <b>NCBI Official Synonym Full Names</b> | carbonic anhydrase 9                               |
| <b>NCBI Official Symbol</b>             | CA9                                                |
| <b>NCBI Official Synonym Symbols</b>    | MN; CAIX                                           |
| <b>NCBI Protein Information</b>         | carbonic anhydrase 9                               |
| <b>UniProt Protein Name</b>             | Carbonic anhydrase 9                               |
| <b>UniProt Gene Name</b>                | <b>CA9</b>                                         |
| <b>UniProt Synonym Gene Names</b>       | 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/monoclonal/carbonic-anhydrase-ix-antibody-clone-005-immunohistochemistry-elisa/254459>