

# Anti-CA1 Picoband Antibody

Catalog # ABO12216

## Product Information

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|--------------------------|----------------------------------------------------------------------------------------------------------------|
| <b>Application</b>       | WB, IHC-P                                                                                                      |
| <b>Primary Accession</b> | <a href="#">P00915</a>                                                                                         |
| <b>Host</b>              | Rabbit                                                                                                         |
| <b>Reactivity</b>        | Human, Rat                                                                                                     |
| <b>Clonality</b>         | Polyclonal                                                                                                     |
| <b>Format</b>            | Lyophilized                                                                                                    |
| <b>Description</b>       | Rabbit IgG polyclonal antibody for Carbonic anhydrase 1(CA1) detection.<br>Tested with WB, IHC-P in Human;Rat. |

**Reconstitution** Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

## Additional Information

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|---------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Gene ID</b>                  | 759                                                                                                                                                                                   |
| <b>Other Names</b>              | Carbonic anhydrase 1, 4.2.1.1, Carbonate dehydratase I, Carbonic anhydrase B, CAB, Carbonic anhydrase I, CA-I, CA1                                                                    |
| <b>Calculated MW</b>            | 28870                                                                                                                                                                                 |
| <b>Application Details</b>      | Immunohistochemistry(Paraffin-embedded Section), 0.5-1 $\mu$ g/ml, Human, By Heat<br>Western blot, 0.1-0.5 $\mu$ g/ml, Human, Rat                                                     |
| <b>Subcellular Localization</b> | Cytoplasm.                                                                                                                                                                            |
| <b>Source</b>                   | Eukaryota                                                                                                                                                                             |
| <b>Protein Name</b>             | Carbonic anhydrase 1                                                                                                                                                                  |
| <b>Contents</b>                 | Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na <sub>2</sub> HPO <sub>4</sub> , 0.05mg NaN <sub>3</sub> .                                                                            |
| <b>Immunogen</b>                | 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.              |
| <b>Purification</b>             | Immunogen affinity purified.                                                                                                                                                          |
| <b>Cross Reactivity</b>         | No cross reactivity with other proteins                                                                                                                                               |
| <b>Storage</b>                  | At -20 °C for one year. After r ° Constitution, at 4 °C for one month. It ° Can also be aliquotted and stored frozen at -20 °C for a longer time.Avoid repeated freezing and thawing. |

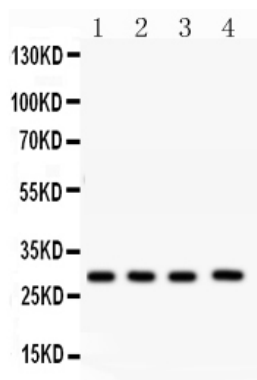
## Protein Information

|                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
|-------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Name              | CA1                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| Function          | Catalyzes the reversible hydration of carbon dioxide (PubMed: <a href="#">10550681</a> , PubMed: <a href="#">16506782</a> , PubMed: <a href="#">16686544</a> , PubMed: <a href="#">16807956</a> , PubMed: <a href="#">17127057</a> , PubMed: <a href="#">17314045</a> , PubMed: <a href="#">17407288</a> , PubMed: <a href="#">18618712</a> , PubMed: <a href="#">19186056</a> , PubMed: <a href="#">19206230</a> ). Can hydrate cyanamide to urea (PubMed: <a href="#">10550681</a> ). |
| Cellular Location | Cytoplasm {ECO:0000250 UniProtKB:B0BNN3}.                                                                                                                                                                                                                                                                                                                                                                                                                                               |

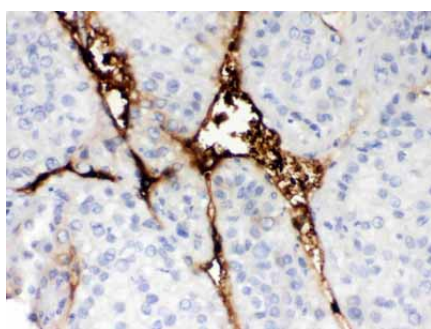
## Background

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.

## Images



Anti-CA1 Picoband antibody, ABO12216, Western blotting All lanes: Anti CA1 (ABO12216) at 0.5ug/ml Lane 1: Rat Spleen Tissue Lysate at 50ug Lane 2: Rat Liver Tissue Lysate at 50ug Lane 3: Rat Kidney Tissue Lysate at 50ug Lane 4: Human Placenta Tissue Lysate at 50ug Predicted bind size: 29KD Observed bind size: 29KD



Anti-CA1 Picoband antibody, ABO12216, IHC(P) IHC(P): Human Liver Cancer Tissue

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.