

Anti-Carbonic Anhydrase I Antibody
Catalog # ABO10747**Specification**

Anti-Carbonic Anhydrase I Antibody - Product Information

Application	WB
Primary Accession	P00915
Host	Rabbit
Reactivity	Human, Rat
Clonality	Polyclonal
Format	Lyophilized

Description

Rabbit IgG polyclonal antibody for Carbonic anhydrase 1(CA1) detection. Tested with WB in Human;Rat.

Reconstitution

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

Anti-Carbonic Anhydrase I Antibody - Additional Information

Gene ID 759

Other Names

Carbonic anhydrase 1, 4.2.1.1, Carbonate dehydratase I, Carbonic anhydrase B, CAB, Carbonic anhydrase I, CA-I, CA1

Calculated MW

28870 MW KDa

Application Details

Western blot, 0.1-0.5 µg/ml, Human, Rat

Subcellular Localization

Cytoplasm.

Protein Name

Carbonic anhydrase 1

Contents

Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na₂HPO₄, 0.05mg Thimerosal, 0.05mg NaN₃.

Immunogen

A synthetic peptide corresponding to a sequence at the N-terminus of human Carbonic Anhydrase I(51-68aa SYNPTAKEIINVGHSHF), different from the mouse sequence by one amino acid.

Purification

Immunogen affinity purified.

Cross Reactivity

No cross reactivity with other proteins

Storage

At -20°C for one year. After reconstitution, 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.

Anti-Carbonic Anhydrase I Antibody - Protein Information

Name CA1

Function

Catalyzes the reversible hydration of carbon dioxide (PubMed: [10550681](http://www.uniprot.org/citations/10550681), PubMed: [16506782](http://www.uniprot.org/citations/16506782), PubMed: [16686544](http://www.uniprot.org/citations/16686544), PubMed: [16807956](http://www.uniprot.org/citations/16807956), PubMed: [17127057](http://www.uniprot.org/citations/17127057), PubMed: [17314045](http://www.uniprot.org/citations/17314045), PubMed: [17407288](http://www.uniprot.org/citations/17407288), PubMed: [18618712](http://www.uniprot.org/citations/18618712), PubMed: [19186056](http://www.uniprot.org/citations/19186056), PubMed: [19206230](http://www.uniprot.org/citations/19206230)). Can hydrate cyanamide to urea (PubMed: [10550681](http://www.uniprot.org/citations/10550681)).

Cellular Location

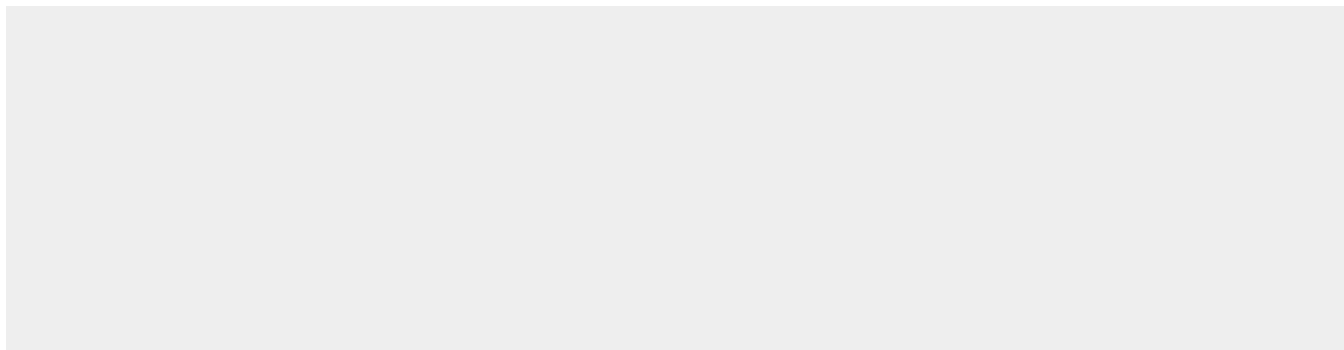
Cytoplasm {ECO:0000250|UniProtKB:B0BNN3}.

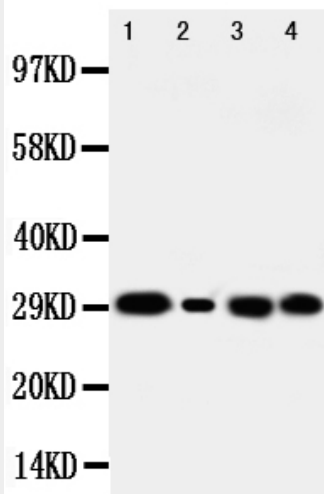
Anti-Carbonic Anhydrase I Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

Anti-Carbonic Anhydrase I Antibody - Images





Anti-Carbonic Anhydrase I antibody, ABO10747, Western blotting
Lane 1: Rat Spleen Tissue Lysate
Lane 2: Rat Testis Tissue Lysate
Lane 3: Rat Kidney Tissue Lysate
Lane 4: Rat Lung Tissue Lysate

Anti-Carbonic Anhydrase I Antibody - 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 participate in a variety of biologic processes like respiration, calcification, acid-base balance etc.