

### Anti-CARBONIC ANHYDRASE I (GOAT) Antibody Carbonic Anhydrase I Antibody Catalog # ASR3634

## **Specification**

# Anti-CARBONIC ANHYDRASE I (GOAT) Antibody - Product Information

Host Conjugate Target Species Reactivity Clonality Application Application Note	Goat Unconjugated Human Human Polyclonal WB, E, I, LCI Anti-Carbonic Anhydrase I has been assayed against 1.0 ug of Carbonic Anhydrase I [Human Erythrocytes] in a standard ELISA using Peroxidase conjugated Affinity Purified anti-Goat IgG [H&L] (Rabbit) code #605-4302 and (ABTS (2,2'-azino-bis-[3-ethylbenthiazoline-6-sulf onic acid]) code # ABTS-100 as a substrate for 30 minutes at room temperature. A working dilution of 1:1,000 to 1:5,000 is suggested for this product.
Physical State Buffer	Lyophilized 0.01 M Sodium Phosphate, 0.15 M Sodium
Immunogen	Chloride, pH 7.2 Carbonic Anhydrase I [Human Erythrocytes]
Reconstitution Volume Reconstitution Buffer	2.0 mL Restore with deionized water (or equivalent)
Preservative	0.01% (w/v) Sodium Azide

## Anti-CARBONIC ANHYDRASE I (GOAT) Antibody - Additional Information

Gene ID 759

Other Names 759

Purity

This product was prepared from monospecific antiserum by a delipidation and defibrination. Assay by immunoelectrophoresis resulted in a single precipitin arc against anti-goat serum, purified and partially purified Carbonic Anhydrase I [Human Erythrocytes]. Cross reactivity against Carbonic Anhydrase I from other tissues and species may occur but have not been specifically determined.

#### **Storage Condition**

Store vial at 4° C prior to restoration. For extended storage aliquot contents and freeze at -20° C or below. Avoid cycles of freezing and thawing. Centrifuge product if not completely clear after standing at room temperature. This product is stable for several weeks at 4° C as an undiluted



liquid. Dilute only prior to immediate use.

## Precautions Note

This product is for research use only and is not intended for therapeutic or diagnostic applications.

# Anti-CARBONIC ANHYDRASE I (GOAT) Antibody - Protein Information

Name CA1

**Function** 

Catalyzes the reversible hydration of carbon dioxide (PubMed:<a href="http://www.uniprot.org/citations/10550681" target="\_blank">10550681</a>, PubMed:<a href="http://www.uniprot.org/citations/16506782" target="\_blank">16506782</a>, PubMed:<a href="http://www.uniprot.org/citations/16686544" target="\_blank">16686544</a>, PubMed:<a href="http://www.uniprot.org/citations/166807956" target="\_blank">16686544</a>, PubMed:<a href="http://www.uniprot.org/citations/16807956" target="\_blank">16807956</a>, PubMed:<a href="http://www.uniprot.org/citations/17127057" target="\_blank">17127057</a>, PubMed:<a href="http://www.uniprot.org/citations/17127057" target="\_blank">17314045</a>, PubMed:<a href="http://www.uniprot.org/citations/17314045" target="\_blank">17314045</a>, PubMed:<a href="http://www.uniprot.org/citations/17314045" target="\_blank">18618712</a>, PubMed:<a href="http://www.uniprot.org/citations/17407288" target="\_blank">18618712</a>, PubMed:<a href="http://www.uniprot.org/citations/17407288" target="\_blank">18618712</a>, PubMed:<a href="http://www.uniprot.org/citations/18618712" target="\_blank">19186056</a>, PubMed:<a href="http://www.uniprot.org/citations/19186056" target="\_blank">19186056</a>, PubMed:<a href="http://www.uniprot.org/citations/19206230" target="\_blank">19206230</a>). Can hydrate cyanamide to urea (PubMed:<a href="http://www.uniprot.org/citations/10550681" target=" blank">10550681</a>).

Cellular Location Cytoplasm {ECO:0000250|UniProtKB:B0BNN3}.

## Anti-CARBONIC ANHYDRASE I (GOAT) Antibody - Protocols

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

- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

Anti-CARBONIC ANHYDRASE I (GOAT) Antibody - Images

# Anti-CARBONIC ANHYDRASE I (GOAT) Antibody - Background

Carbonic Anhydrase 1 reverses hydration of carbon dioxide and can hydrate cyanamide to urea. Carbonic Anhydrase I is activated by histamine, imidazole, L-adrenaline, L- and D-histidine, and Land D-phenylalanine. It is inhibited by coumarins, sulfonamide derivatives such as acetazolamide, benzenesulfonamide and derivatives (4-carboxyethylbenzene-sulfonamide,

4-carboxyethylbenzene-sulfonamide ethyl ester, 4-(acetyl-2-aminoethyl)benzene-sulfonamide, 4-aminoethylbenzene-sulfonamide), and 'prong inhibitors' BR15, BR17, BR22 and BR30. It is activated by a short exposition to Foscarnet (phosphonoformate trisodium salt), but inhibited by a long one. Esterase activity is weakly reduced by cyanamide.