

Anti-CARBONIC ANHYDRASE II (RABBIT) Antibody
Carbonic Anhydrase II Antibody
Catalog # ASR3653**Specification**

Anti-CARBONIC ANHYDRASE II (RABBIT) Antibody - Product Information

Host	Rabbit
Conjugate	Unconjugated
Target Species	Human
Reactivity	Human
Clonality	Polyclonal
Application	WB, IHC, E, I, LCI
Application Note	Anti-Carbonic Anhydrase II is suitable for use in ELISA, western blot, and immunohistochemistry. Specific conditions for reactivity should be optimized by the end user.
Physical State	Lyophilized
Buffer	0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2
Immunogen	Carbonic Anhydrase II [Human Erythrocytes]
Reconstitution Volume	2.0 mL
Reconstitution Buffer	Restore with deionized water (or equivalent)
Preservative	0.01% (w/v) Sodium Azide

Anti-CARBONIC ANHYDRASE II (RABBIT) Antibody - Additional Information**Gene ID** 760**Other Names**
760**Purity**

This product was prepared from monospecific antiserum by a delipidation and defibrination. Assay by immunoelectrophoresis resulted in a single precipitin arc against anti-rabbit serum, purified and partially purified Carbonic Anhydrase II [Human Erythrocytes]. Cross reactivity against Carbonic Anhydrase II 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 II (RABBIT) Antibody - Protein Information

Name CA2

Function

Catalyzes the reversible hydration of carbon dioxide (PubMed:11327835, PubMed:11802772, PubMed:11831900, PubMed:12056894, PubMed:12171926, PubMed:1336460, PubMed:14736236, PubMed:15300855, PubMed:15453828, PubMed:15667203, PubMed:15865431, PubMed:16106378, PubMed:16214338, PubMed:16290146, PubMed:16686544, PubMed:16759856, PubMed:16807956, PubMed:17127057, PubMed:17251017, PubMed:17314045, PubMed:17330962, PubMed:17346964, PubMed:17540563, PubMed:17588751, PubMed:17705204, PubMed:18024029, PubMed:18162396, PubMed:18266323, PubMed:18374572, PubMed:18481843, PubMed:18618712, PubMed:18640037, PubMed:18942852, PubMed:1909891, PubMed:1910042, PubMed:19170619, PubMed:19186056, PubMed:19206230, PubMed:19520834, PubMed:19778001, PubMed:7761440, PubMed:7901850, PubMed:8218160, PubMed:8262987, PubMed:8399159, PubMed:8451242, PubMed:8485129, PubMed:8639494, PubMed:9265618, PubMed:9398308). Can also hydrate cyanamide to urea (PubMed:<a href="http://www.uniprot.org/citations/10550681"

target="_blank">10550681, PubMed:11015219). Stimulates the chloride-bicarbonate exchange activity of SLC26A6 (PubMed:15990874). Essential for bone resorption and osteoclast differentiation (PubMed:15300855). Involved in the regulation of fluid secretion into the anterior chamber of the eye. Contributes to intracellular pH regulation in the duodenal upper villous epithelium during proton-coupled peptide absorption.

Cellular Location

Cytoplasm. Cell membrane. Note=Colocalized with SLC26A6 at the surface of the cell membrane in order to form a bicarbonate transport metabolon. Displaced from the cytosolic surface of the cell membrane by PKC in phorbol myristate acetate (PMA)-induced cells

Anti-CARBONIC ANHYDRASE II (RABBIT) 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 II (RABBIT) Antibody - Images

Anti-CARBONIC ANHYDRASE II (RABBIT) Antibody - Background

Carbonic Anhydrase 2 is essential for bone resorption and osteoclast differentiation. It reverses hydration of carbon dioxide and can hydrate cyanamide to urea. It is involved in the regulation of fluid secretion into the anterior chamber of the eye. Carbonic Anhydrase II contributes to intracellular pH regulation in the duodenal upper villous epithelium during proton-coupled peptide absorption. It stimulates the chloride-bicarbonate exchange activity of SLC26A6. it is used for target of drugs used in treatments against glaucoma disorder and breast cancer.