

CA2 / Carbonic Anhydrase II Antibody
Rabbit Polyclonal Antibody
Catalog # ALS11525

Specification

CA2 / Carbonic Anhydrase II Antibody - Product Information

Application	IHC
Primary Accession	P00918
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Calculated MW	29kDa KDa

CA2 / Carbonic Anhydrase II Antibody - Additional Information

Gene ID 760

Other Names

Carbonic anhydrase 2, 4.2.1.1, Carbonate dehydratase II, Carbonic anhydrase C, CAC, Carbonic anhydrase II, CA-II, CA2

Target/Specificity

Carbonic Anhydrase II [Human Erythrocytes].

Reconstitution & Storage

Long term: -20°C; Short term: +4°C. Avoid repeat freeze-thaw cycles.

Precautions

CA2 / Carbonic Anhydrase II Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

CA2 / Carbonic Anhydrase II Antibody - Protein Information

Name CA2

Function

Catalyzes the reversible hydration of carbon dioxide (PubMed:1909891, PubMed:1910042, PubMed:1336460, PubMed:8485129, PubMed:8399159, PubMed:8218160, PubMed:8262987, PubMed:8451242, PubMed:7901850, PubMed:7761440, PubMed:8639494, PubMed:<a

[9265618](http://www.uniprot.org/citations/9265618) PubMed: [17330962](http://www.uniprot.org/citations/17330962) PubMed: [9398308](http://www.uniprot.org/citations/9398308) PubMed: [11327835](http://www.uniprot.org/citations/11327835) PubMed: [12056894](http://www.uniprot.org/citations/12056894) PubMed: [17346964](http://www.uniprot.org/citations/17346964) PubMed: [12171926](http://www.uniprot.org/citations/12171926) PubMed: [15453828](http://www.uniprot.org/citations/15453828) PubMed: [16214338](http://www.uniprot.org/citations/16214338) PubMed: [15865431](http://www.uniprot.org/citations/15865431) PubMed: [16106378](http://www.uniprot.org/citations/16106378) PubMed: [15300855](http://www.uniprot.org/citations/15300855) PubMed: [15667203](http://www.uniprot.org/citations/15667203) PubMed: [18942852](http://www.uniprot.org/citations/18942852) PubMed: [11831900](http://www.uniprot.org/citations/11831900) PubMed: [17251017](http://www.uniprot.org/citations/17251017) PubMed: [17314045](http://www.uniprot.org/citations/17314045) PubMed: [18618712](http://www.uniprot.org/citations/18618712) PubMed: [1336460](http://www.uniprot.org/citations/1336460) PubMed: [11802772](http://www.uniprot.org/citations/11802772) PubMed: [14736236](http://www.uniprot.org/citations/14736236) PubMed: [16290146](http://www.uniprot.org/citations/16290146) PubMed: [16759856](http://www.uniprot.org/citations/16759856) PubMed: [16807956](http://www.uniprot.org/citations/16807956) PubMed: [16686544](http://www.uniprot.org/citations/16686544) PubMed: [17705204](http://www.uniprot.org/citations/17705204) PubMed: [17127057](http://www.uniprot.org/citations/17127057) PubMed: [17540563](http://www.uniprot.org/citations/17540563) PubMed: [17588751](http://www.uniprot.org/citations/17588751) PubMed: [18266323](http://www.uniprot.org/citations/18266323) PubMed: [18024029](http://www.uniprot.org/citations/18024029) PubMed: [18162396](http://www.uniprot.org/citations/18162396) PubMed: [18374572](http://www.uniprot.org/citations/18374572) PubMed: [18640037](http://www.uniprot.org/citations/18640037) PubMed: [18481843](http://www.uniprot.org/citations/18481843) PubMed: [19170619](http://www.uniprot.org/citations/19170619) PubMed: [19186056](http://www.uniprot.org/citations/19186056) PubMed: [19206230](http://www.uniprot.org/citations/19206230) PubMed: [19778001](http://www.uniprot.org/citations/19778001) PubMed: [19520834](http://www.uniprot.org/citations/19520834)). Can also hydrate cyanamide to urea (PubMed: [10550681](http://www.uniprot.org/citations/10550681) PubMed: [11015219](http://www.uniprot.org/citations/11015219)). Stimulates the chloride-bicarbonate exchange activity of SLC26A6 (PubMed: [15990874](http://www.uniprot.org/citations/15990874)). Essential for bone resorption and osteoclast differentiation (PubMed: [15300855](http://www.uniprot.org/citations/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

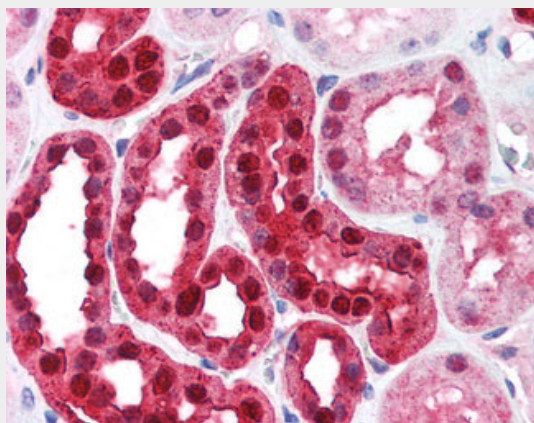
Cytoplasm. Cell membrane. Note=Colocalized with SLC26A6 at the surface of the cell membrane in order to form a bicarbonate transport metabolon. Displaced from the cytosolic surface of the cell membrane by PKC in phorbol myristate acetate (PMA)-induced cells

CA2 / Carbonic Anhydrase II Antibody - Protocols

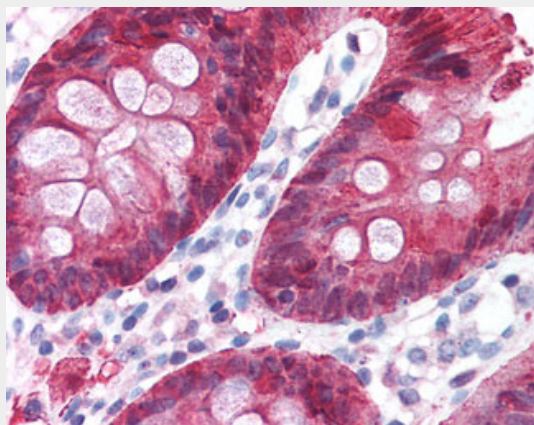
Provided below are standard protocols that you may find useful for product applications.

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

CA2 / Carbonic Anhydrase II Antibody - Images



Anti-Carbonic Anhydrase II antibody IHC of human kidney.



Anti-Carbonic Anhydrase II antibody IHC of human colon.

CA2 / Carbonic Anhydrase II Antibody - Background

Essential for bone resorption and osteoclast differentiation (By similarity). Reversible hydration of carbon dioxide. Can hydrate cyanamide to urea. 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. Stimulates the chloride-bicarbonate exchange activity of SLC26A6.

CA2 / Carbonic Anhydrase II Antibody - References

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Murakami H.,et al.Genomics 1:159-166(1987).

Halleck A.,et al.Submitted (JUN-2004) to the EMBL/GenBank/DDBJ databases.

Ota T.,et al.Nat. Genet. 36:40-45(2004).

Mural R.J.,et al.Submitted (JUL-2005) to the EMBL/GenBank/DDBJ databases.