

**CA II Polyclonal Antibody**  
Catalog # AP68756**Specification**

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**CA II Polyclonal Antibody - Product Information**

Application	<b>WB</b>
Primary Accession	<b><a href="#">P00918</a></b>
Reactivity	<b>Human, Rat</b>
Host	<b>Rabbit</b>
Clonality	<b>Polyclonal</b>

**CA II Polyclonal Antibody - Additional Information****Gene ID** 760**Other Names**

CA2; Carbonic anhydrase 2; Carbonate dehydratase II; Carbonic anhydrase C; CAC; Carbonic anhydrase II; CA-II

**Dilution**

WB~~Western Blot: 1/500 - 1/2000. Immunohistochemistry: 1/100 - 1/300. ELISA: 1/40000. Not yet tested in other applications.

**Format**

Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.09% (W/V) sodium azide.

**Storage Conditions**

-20°C

**CA II Polyclonal Antibody - Protein Information****Name** CA2**Function**

Catalyzes the reversible hydration of carbon dioxide (PubMed:<a href="http://www.uniprot.org/citations/11327835" target="\_blank">11327835</a>, PubMed:<a href="http://www.uniprot.org/citations/11802772" target="\_blank">11802772</a>, PubMed:<a href="http://www.uniprot.org/citations/11831900" target="\_blank">11831900</a>, PubMed:<a href="http://www.uniprot.org/citations/12056894" target="\_blank">12056894</a>, PubMed:<a href="http://www.uniprot.org/citations/12171926" target="\_blank">12171926</a>, PubMed:<a href="http://www.uniprot.org/citations/1336460" target="\_blank">1336460</a>, PubMed:<a href="http://www.uniprot.org/citations/14736236" target="\_blank">14736236</a>, PubMed:<a href="http://www.uniprot.org/citations/15300855" target="\_blank">15300855</a>, PubMed:<a href="http://www.uniprot.org/citations/15453828" target="\_blank">15453828</a>, PubMed:<a href="http://www.uniprot.org/citations/15667203" target="\_blank">15667203</a>, PubMed:<a href="http://www.uniprot.org/citations/15865431" target="\_blank">15865431</a>, PubMed:<a href="http://www.uniprot.org/citations/16106378" target="\_blank">16106378</a>, PubMed:<a href="http://www.uniprot.org/citations/16214338" target="\_blank">16214338</a>, PubMed:<a

href="http://www.uniprot.org/citations/16290146" target="\_blank">16290146</a>, PubMed:<a href="http://www.uniprot.org/citations/16686544" target="\_blank">16686544</a>, PubMed:<a href="http://www.uniprot.org/citations/16759856" target="\_blank">16759856</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/17251017" target="\_blank">17251017</a>, PubMed:<a href="http://www.uniprot.org/citations/17314045" target="\_blank">17314045</a>, PubMed:<a href="http://www.uniprot.org/citations/17330962" target="\_blank">17330962</a>, PubMed:<a href="http://www.uniprot.org/citations/17346964" target="\_blank">17346964</a>, PubMed:<a href="http://www.uniprot.org/citations/17540563" target="\_blank">17540563</a>, PubMed:<a href="http://www.uniprot.org/citations/17588751" target="\_blank">17588751</a>, PubMed:<a href="http://www.uniprot.org/citations/17705204" target="\_blank">17705204</a>, PubMed:<a href="http://www.uniprot.org/citations/18024029" target="\_blank">18024029</a>, PubMed:<a href="http://www.uniprot.org/citations/18162396" target="\_blank">18162396</a>, PubMed:<a href="http://www.uniprot.org/citations/18266323" target="\_blank">18266323</a>, PubMed:<a href="http://www.uniprot.org/citations/18374572" target="\_blank">18374572</a>, PubMed:<a href="http://www.uniprot.org/citations/18481843" target="\_blank">18481843</a>, PubMed:<a href="http://www.uniprot.org/citations/18618712" target="\_blank">18618712</a>, PubMed:<a href="http://www.uniprot.org/citations/18640037" target="\_blank">18640037</a>, PubMed:<a href="http://www.uniprot.org/citations/18942852" target="\_blank">18942852</a>, PubMed:<a href="http://www.uniprot.org/citations/1909891" target="\_blank">1909891</a>, PubMed:<a href="http://www.uniprot.org/citations/1910042" target="\_blank">1910042</a>, PubMed:<a href="http://www.uniprot.org/citations/19170619" target="\_blank">19170619</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>, PubMed:<a href="http://www.uniprot.org/citations/19520834" target="\_blank">19520834</a>, PubMed:<a href="http://www.uniprot.org/citations/19778001" target="\_blank">19778001</a>, PubMed:<a href="http://www.uniprot.org/citations/7761440" target="\_blank">7761440</a>, PubMed:<a href="http://www.uniprot.org/citations/7901850" target="\_blank">7901850</a>, PubMed:<a href="http://www.uniprot.org/citations/8218160" target="\_blank">8218160</a>, PubMed:<a href="http://www.uniprot.org/citations/8262987" target="\_blank">8262987</a>, PubMed:<a href="http://www.uniprot.org/citations/8399159" target="\_blank">8399159</a>, PubMed:<a href="http://www.uniprot.org/citations/8451242" target="\_blank">8451242</a>, PubMed:<a href="http://www.uniprot.org/citations/8485129" target="\_blank">8485129</a>, PubMed:<a href="http://www.uniprot.org/citations/8639494" target="\_blank">8639494</a>, PubMed:<a href="http://www.uniprot.org/citations/9265618" target="\_blank">9265618</a>, PubMed:<a href="http://www.uniprot.org/citations/9398308" target="\_blank">9398308</a>). Can also hydrate cyanamide to urea (PubMed:<a href="http://www.uniprot.org/citations/10550681" target="\_blank">10550681</a>, PubMed:<a href="http://www.uniprot.org/citations/11015219" target="\_blank">11015219</a>). Stimulates the chloride-bicarbonate exchange activity of SLC26A6 (PubMed:<a href="http://www.uniprot.org/citations/15990874" target="\_blank">15990874</a>). Essential for bone resorption and osteoclast differentiation (PubMed:<a href="http://www.uniprot.org/citations/15300855" target="\_blank">15300855</a>). 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

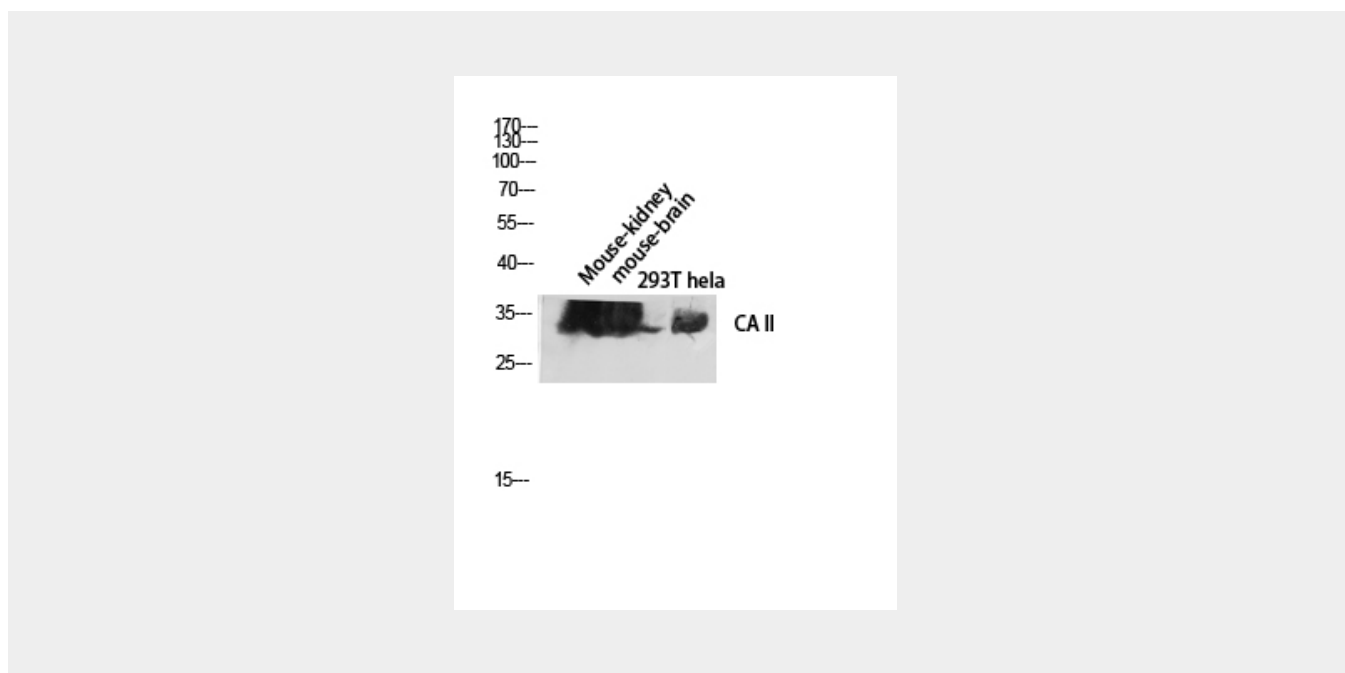
Cytoplasm. Cell membrane. Note=Colocalized with SLC26A6 at the surface of the cell membrane in order to form a bicarbonate transport metabolon. Displaced from the cytosolic surface of the cell membrane by PKC in phorbol myristate acetate (PMA)-induced cells

### CA II Polyclonal 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](#)

### CA II Polyclonal Antibody - Images



### CA II Polyclonal 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.