

Anti-Carbonic Anhydrase 2 Antibody
Rabbit polyclonal antibody to Carbonic Anhydrase 2
Catalog # AP59493

Specification

Anti-Carbonic Anhydrase 2 Antibody - Product Information

Application	WB, IHC
Primary Accession	P00918
Reactivity	Human, Rat, Monkey
Host	Rabbit
Clonality	Polyclonal
Calculated MW	29246

Anti-Carbonic Anhydrase 2 Antibody - Additional Information

Gene ID 760

Other Names

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

Target/Specificity

Recognizes endogenous levels of Carbonic Anhydrase 2 protein.

Dilution

WB~~WB (1/500 - 1/1000), IH (1/100 - 1/200)
IHC~~1:100~500

Format

Liquid in 0.42% Potassium phosphate, 0.87% Sodium chloride, pH 7.3, 30% glycerol, and 0.09% (W/V) sodium azide.

Storage

Store at -20 °C. Stable for 12 months from date of receipt

Anti-Carbonic Anhydrase 2 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:<a

[15300855](http://www.uniprot.org/citations/15300855), PubMed: [15453828](http://www.uniprot.org/citations/15453828), PubMed: [15667203](http://www.uniprot.org/citations/15667203), PubMed: [15865431](http://www.uniprot.org/citations/15865431), PubMed: [16106378](http://www.uniprot.org/citations/16106378), PubMed: [16214338](http://www.uniprot.org/citations/16214338), PubMed: [16290146](http://www.uniprot.org/citations/16290146), PubMed: [16686544](http://www.uniprot.org/citations/16686544), PubMed: [16759856](http://www.uniprot.org/citations/16759856), PubMed: [16807956](http://www.uniprot.org/citations/16807956), PubMed: [17127057](http://www.uniprot.org/citations/17127057), PubMed: [17251017](http://www.uniprot.org/citations/17251017), PubMed: [17314045](http://www.uniprot.org/citations/17314045), PubMed: [17330962](http://www.uniprot.org/citations/17330962), PubMed: [17346964](http://www.uniprot.org/citations/17346964), PubMed: [17540563](http://www.uniprot.org/citations/17540563), PubMed: [17588751](http://www.uniprot.org/citations/17588751), PubMed: [17705204](http://www.uniprot.org/citations/17705204), PubMed: [18024029](http://www.uniprot.org/citations/18024029), PubMed: [18162396](http://www.uniprot.org/citations/18162396), PubMed: [18266323](http://www.uniprot.org/citations/18266323), PubMed: [18374572](http://www.uniprot.org/citations/18374572), PubMed: [18481843](http://www.uniprot.org/citations/18481843), PubMed: [18618712](http://www.uniprot.org/citations/18618712), PubMed: [18640037](http://www.uniprot.org/citations/18640037), PubMed: [18942852](http://www.uniprot.org/citations/18942852), PubMed: [1909891](http://www.uniprot.org/citations/1909891), PubMed: [1910042](http://www.uniprot.org/citations/1910042), 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: [19520834](http://www.uniprot.org/citations/19520834), PubMed: [19778001](http://www.uniprot.org/citations/19778001), PubMed: [7761440](http://www.uniprot.org/citations/7761440), PubMed: [7901850](http://www.uniprot.org/citations/7901850), PubMed: [8218160](http://www.uniprot.org/citations/8218160), PubMed: [8262987](http://www.uniprot.org/citations/8262987), PubMed: [8399159](http://www.uniprot.org/citations/8399159), PubMed: [8451242](http://www.uniprot.org/citations/8451242), PubMed: [8485129](http://www.uniprot.org/citations/8485129), PubMed: [8639494](http://www.uniprot.org/citations/8639494), PubMed: [9265618](http://www.uniprot.org/citations/9265618), PubMed: [9398308](http://www.uniprot.org/citations/9398308)). 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

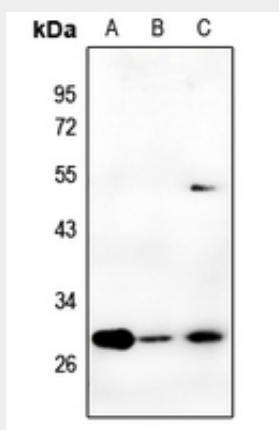
Cytoplasm. Cell membrane. Note=Colocalized with SLC26A6 at the surface of the cell membrane in order to form a bicarbonate transport metabolon. Displaced from the cytosolic surface of the cell membrane by PKC in phorbol myristate acetate (PMA)-induced cells

Anti-Carbonic Anhydrase 2 Antibody - Protocols

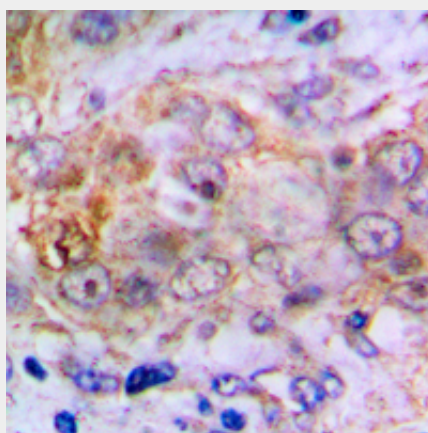
Provided below are standard protocols that you may find useful for product applications.

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

Anti-Carbonic Anhydrase 2 Antibody - Images



Western blot analysis of Carbonic Anhydrase 2 expression in HEK293T (A), HCT116 (B), rat brain (C) whole cell lysates.



Immunohistochemical analysis of Carbonic Anhydrase 2 staining in human lung cancer formalin fixed paraffin embedded tissue section. The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH 6.0). The section was then incubated with the antibody at room temperature and detected using an HRP conjugated compact polymer system. DAB was used as the chromogen. The section was then counterstained with haematoxylin and mounted with DPX.

Anti-Carbonic Anhydrase 2 Antibody - Background

KLH-conjugated synthetic peptide encompassing a sequence within the C-term region of human Carbonic Anhydrase 2. The exact sequence is proprietary.