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CA2 Antibody (C-term)
Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP7307b

Specification

CA2 Antibody (C-term) - Product Information

Application	**WB,E**
Primary Accession	P00918
Reactivity	**Human**
Host	**Rabbit**
Clonality	**Polyclonal**
Isotype	**Rabbit IgG**
Calculated MW	**29246**
Antigen Region	**209-238**

CA2 Antibody (C-term) - Additional Information

Gene ID 760

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

Target/Specificity
This CA2 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 209-238 amino acids from the C-terminal region of human CA2.

Dilution
WB~~1:1000

Format
Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is prepared by Saturated Ammonium Sulfate (SAS) precipitation followed by dialysis against PBS.

Storage
Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions
CA2 Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

CA2 Antibody (C-term) - 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: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.

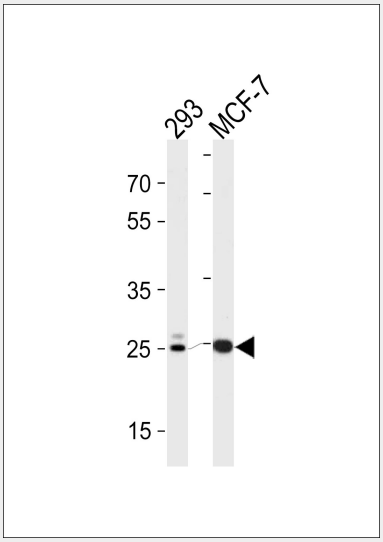
Cellular Location
Cytoplasm. Cell membrane. Note=Colocalized with SLC26A6 at the surface of the cell membrane in order to form a bicarbonate transport metabolon. Displaced from the cytosolic surface of the cell membrane by PKC in phorbol myristate acetate (PMA)-induced cells

CA2 Antibody (C-term) - Protocols

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

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

CA2 Antibody (C-term) - Images



CA2 Antibody (C-term) (Cat. #AP7307b) western blot analysis in 293,MCF-7 cell line lysates

(35ug/lane).This demonstrates the CA2 antibody detected the CA2 protein (arrow).

CA2 Antibody (C-term) - Background

CA2 is one of several (at least 7) isozymes of carbonic anhydrase. The protein catalyzes reversible hydration of carbon dioxide. Defects in this enzyme are associated with osteopetrosis and renal tubular acidosis.

CA2 Antibody (C-term) - References

Fisher,S.Z. Acta Crystallogr. Sect. F Struct. Biol. Cryst. Commun. 65 (PT 5), 495-498 (2009)
Adamus,G. and Karren,L. J. Autoimmun. 32 (2), 133-139 (2009)
Hu,P.Y., Roth,D.E. Hum. Mutat. 1 (4), 288-292 (1992)