

## CA2 Antibody (C-term)

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP7307b

## **Specification**

#### CA2 Antibody (C-term) - Product Information

Application WB,E P00918 **Primary Accession** Human Reactivity Host Rabbit Clonality **Polyclonal** Isotype Rabbit Ig 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**

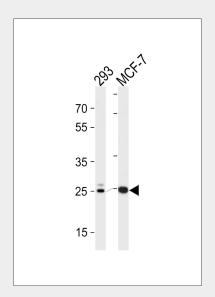
Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is prepared by Saturated Ammonium Sulfate (SAS) precipitation followed by dialysis against PBS.

#### **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) (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)



### CA2 Antibody (C-term) - Protein Information

## Name CA2

#### **Function**

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 protoncoupled peptide absorption. Stimulates the chloride-bicarbonate exchange activity of SLC26A6.

## **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