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CA2 Antibody (C-term) Blocking Peptide

Synthetic peptide
Catalog # BP7307b

Specification

CA2 Antibody (C-term) Blocking Peptide - Product Information

Primary Accession P00918

CA2 Antibody (C-term) Blocking Peptide - 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
The synthetic peptide sequence used to generate the antibody AP7307b was selected from the C-term region of human CA2. A 10 to 100 fold molar excess to antibody is recommended. Precise conditions should be optimized for a particular assay.

Format
Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

Storage
Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

Precautions
This product is for research use only. Not for use in diagnostic or therapeutic procedures.

CA2 Antibody (C-term) Blocking Peptide - Protein Information

Name CA2

CA2 Antibody (C-term) Blocking Peptide - 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) Blocking Peptide - 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)

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 proton-coupled 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) Blocking Peptide - Protocols

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

- Blocking Peptides