

CA2 Antibody (N-term) Blocking Peptide
Synthetic peptide
Catalog # BP7307a**Specification**

CA2 Antibody (N-term) Blocking Peptide - Product InformationPrimary Accession [P00918](#)**CA2 Antibody (N-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

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 (N-term) Blocking Peptide - Protein Information**Name** CA2**Function**

Catalyzes the reversible hydration of carbon dioxide (PubMed:1909891, PubMed:1910042, PubMed:1336460, PubMed:8485129, PubMed:8399159, PubMed:8218160, PubMed:8262987, PubMed:8451242, PubMed:7901850, PubMed:7761440, PubMed:8639494, PubMed:9265618, PubMed:17330962, PubMed:9398308, PubMed:11327835, PubMed:12056894, PubMed:<a

[17346964](http://www.uniprot.org/citations/17346964), PubMed: [12171926](http://www.uniprot.org/citations/12171926), PubMed: [15453828](http://www.uniprot.org/citations/15453828), PubMed: [16214338](http://www.uniprot.org/citations/16214338), PubMed: [15865431](http://www.uniprot.org/citations/15865431), PubMed: [16106378](http://www.uniprot.org/citations/16106378), PubMed: [15300855](http://www.uniprot.org/citations/15300855), PubMed: [15667203](http://www.uniprot.org/citations/15667203), PubMed: [18942852](http://www.uniprot.org/citations/18942852), PubMed: [11831900](http://www.uniprot.org/citations/11831900), PubMed: [17251017](http://www.uniprot.org/citations/17251017), PubMed: [17314045](http://www.uniprot.org/citations/17314045), PubMed: [18618712](http://www.uniprot.org/citations/18618712), PubMed: [1336460](http://www.uniprot.org/citations/1336460), PubMed: [11802772](http://www.uniprot.org/citations/11802772), PubMed: [14736236](http://www.uniprot.org/citations/14736236), PubMed: [16290146](http://www.uniprot.org/citations/16290146), PubMed: [16759856](http://www.uniprot.org/citations/16759856), PubMed: [16807956](http://www.uniprot.org/citations/16807956), PubMed: [16686544](http://www.uniprot.org/citations/16686544), PubMed: [17705204](http://www.uniprot.org/citations/17705204), PubMed: [17127057](http://www.uniprot.org/citations/17127057), PubMed: [17540563](http://www.uniprot.org/citations/17540563), PubMed: [17588751](http://www.uniprot.org/citations/17588751), PubMed: [18266323](http://www.uniprot.org/citations/18266323), PubMed: [18024029](http://www.uniprot.org/citations/18024029), PubMed: [18162396](http://www.uniprot.org/citations/18162396), PubMed: [18374572](http://www.uniprot.org/citations/18374572), PubMed: [18640037](http://www.uniprot.org/citations/18640037), PubMed: [18481843](http://www.uniprot.org/citations/18481843), 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: [19778001](http://www.uniprot.org/citations/19778001), PubMed: [19520834](http://www.uniprot.org/citations/19520834)). 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

CA2 Antibody (N-term) Blocking Peptide - Protocols

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

- [Blocking Peptides](#)

CA2 Antibody (N-term) Blocking Peptide - Images**CA2 Antibody (N-term) Blocking Peptide - Background**

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

CA2 Antibody (N-term) Blocking Peptide - References

Sultana, R., et al. Antioxid. Redox Signal. 12(3):327-336(2010)Fisher, S.Z., et al. Biochemistry 49(3):415-421(2010)Avvaru, B.S., et al. Biochemistry 49(2):249-251(2010)Maupin, C.M., et al. Biochemistry 48(33):7996-8005(2009)Avvaru, B.S., et al. Biochemistry 48(31):7365-7372(2009)