

CA5A Antibody (Center) Blocking Peptide
Synthetic peptide
Catalog # BP9691c**Specification**

CA5A Antibody (Center) Blocking Peptide - Product InformationPrimary Accession [P35218](#)**CA5A Antibody (Center) Blocking Peptide - Additional Information****Gene ID** 763**Other Names**

Carbonic anhydrase 5A, mitochondrial, Carbonate dehydratase VA, Carbonic anhydrase VA, CA-VA, CA5A, CA5

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.

CA5A Antibody (Center) Blocking Peptide - Protein Information**Name** CA5A ([HGNC:1377](#))**Synonyms** CA5**Function**

Mitochondrial carbonic anhydrase that catalyzes the reversible conversion of carbon dioxide to bicarbonate/HCO₃ (PubMed: [8356065](http://www.uniprot.org/citations/8356065), PubMed: [24530203](http://www.uniprot.org/citations/24530203)). Mitochondria are impermeable to HCO₃, and thus this intramitochondrial carbonic anhydrase is pivotal in providing HCO₃ for multiple mitochondrial enzymes that catalyze the formation of essential metabolites of intermediary metabolism in the urea and Krebs cycles (PubMed: [24530203](http://www.uniprot.org/citations/24530203)).

Cellular Location

Mitochondrion.

CA5A Antibody (Center) Blocking Peptide - Protocols

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

- [Blocking Peptides](#)

CA5A Antibody (Center) Blocking Peptide - Images

CA5A Antibody (Center) Blocking Peptide - Background

Carbonic anhydrases (CAs) are a large family of zinc metalloenzymes that catalyze the reversible hydration of carbon dioxide. They participate in a variety of biological processes, including respiration, calcification, acid-base balance, bone resorption, and the formation of aqueous humor, cerebrospinal fluid, saliva, and gastric acid. They show extensive diversity in tissue distribution and in their subcellular localization. CA VA is localized in the mitochondria and expressed primarily in the liver. It may play an important role in ureagenesis and gluconeogenesis.

CA5A Antibody (Center) Blocking Peptide - References

Vullo, D., et al. Bioorg. Med. Chem. Lett. 17(5):1336-1340(2007)Saarnio, J., et al. J. Histochem. Cytochem. 47(4):517-524(1999)Parkkila, A.K., et al. J. Biol. Chem. 273(38):24620-24623(1998)