

**CA9 Antibody (Center) Blocking Peptide**  
**Synthetic peptide**  
**Catalog # BP5000b****Specification**

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**CA9 Antibody (Center) Blocking Peptide - Product Information**Primary Accession [Q16790](#)**CA9 Antibody (Center) Blocking Peptide - Additional Information****Gene ID** 768**Other Names**

Carbonic anhydrase 9, Carbonate dehydratase IX, Carbonic anhydrase IX, CA-IX, CAIX, Membrane antigen MN, P54/58N, Renal cell carcinoma-associated antigen G250, RCC-associated antigen G250, pMW1, CA9, G250, MN

**Target/Specificity**

The synthetic peptide sequence used to generate the antibody [AP5000b](/product/products/AP5000b) was selected from the Center region of human CA9. 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.

**CA9 Antibody (Center) Blocking Peptide - Protein Information****Name** CA9**Synonyms** G250, MN**Function**

Catalyzes the interconversion between carbon dioxide and water and the dissociated ions of carbonic acid (i.e. bicarbonate and hydrogen ions).

**Cellular Location**

Nucleus. Nucleus, nucleolus. Cell membrane; Single-pass type I membrane protein. Cell projection, microvillus membrane; Single-pass type I membrane protein. Note=Found on the surface microvilli and in the nucleus, particularly in nucleolus

**Tissue Location**

Expressed primarily in carcinoma cells lines. Expression is restricted to very few normal tissues and the most abundant expression is found in the epithelial cells of gastric mucosa

**CA9 Antibody (Center) Blocking Peptide - Protocols**

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

- [Blocking Peptides](#)

**CA9 Antibody (Center) Blocking Peptide - Images****CA9 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 IX is a transmembrane protein and the only tumor-associated carbonic anhydrase isoenzyme known. It is expressed in all clear-cell renal cell carcinoma, but is not detected in normal kidney or most other normal tissues. It may be involved in cell proliferation and transformation. This gene was mapped to 17q21.2 by fluorescence in situ hybridization, however, radiation hybrid mapping localized it to 9p13-p12.

**CA9 Antibody (Center) Blocking Peptide - References**

Grabmaier, K., et al., Oncogene 23(33):5624-5631 (2004). Kaluzova, M., et al., Mol. Cell. Biol. 24(13):5757-5766 (2004). Span, P.N., et al., Br. J. Cancer 89(2):271-276 (2003). Hedley, D., et al., Clin. Cancer Res. 9(15):5666-5674 (2003). Bui, M.H., et al., Clin. Cancer Res. 9(2):802-811 (2003).