

CA9 Antibody (N-term)

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP5000d

Specification

CA9 Antibody (N-term) - Product Information

Application WB, FC,E
Primary Accession Q16790
Reactivity Human
Host Rabbit
Clonality Polyclonal
Isotype Rabbit IgG
Antigen Region 48-78

CA9 Antibody (N-term) - 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

This CA9 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 48-78 amino acids from the N-terminal region of human CA9.

Dilution

WB~~1:1000 FC~~1:10~50

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

CA9 Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

CA9 Antibody (N-term) - 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

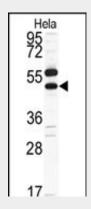
Expressed primarily in carcinoma cells lines. Expression is restricted to very few normal tissues and the most abundant expression is found in the epithelial cells of gastric mucosa

CA9 Antibody (N-term) - Protocols

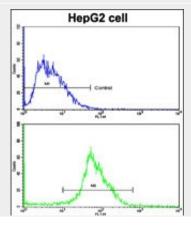
Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- <u>Immunohistochemistry</u>
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

CA9 Antibody (N-term) - Images



Western blot analysis of CA9 antibody (N-term) (Cat.#AP5000d) in Hela cell line lysates (35ug/lane). CA9 (arrow) was detected using the purified Pab.





Flow cytometric analysis of HepG2 cells using CA9 Antibody (N-term)(bottom histogram) compared to a negative control cell (top histogram). FITC-conjugated goat-anti-rabbit secondary antibodies were used for the analysis.

CA9 Antibody (N-term) - 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.

CA9 Antibody (N-term) - 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).