

CA9 Antibody (Center)

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP5000e

Product Information

Application WB, FC, IF, E **Primary Accession** Q16790 Reactivity Human Host Rabbit Clonality Polyclonal Isotype Rabbit IgG **Clone Names** RB18383 **Calculated MW** 49698 **Antigen Region** 113-143

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 113-143 amino acids from the Central

region of human CA9.

Dilution WB~~1:1000 FC~~1:10~50 IF~~1:10~50 E~~Use at an assay dependent

concentration.

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 (Center) is for research use only and not for use in diagnostic or

therapeutic procedures.

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

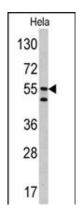
Background

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.

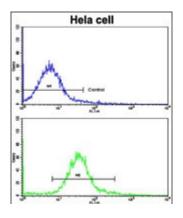
References

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).

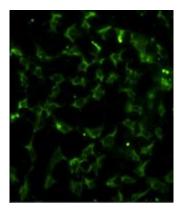
Images



Western blot analysis of CA9 antibody (Center) (Cat.# AP5000e) in Hela cell line lysates (35ug/lane). CA9 (arrow) was detected using the purified Pab.



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



Immunofluorescence analysis of CA9 Antibody (Center) with hela cells . 0.025 mg/ml primary antibody was followed by FITC-conjugated goat anti-rabbit lgG (whole molecule). FITC emits green fluorescence.

Citations

• Overexpression of FZD1 and CAIX are Associated with Invasion, Metastasis, and Poor-Prognosis of the Pancreatic Ductal Adenocarcinoma.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.