10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.622.0609

CA9 Antibody (Center)

Purified Rabbit Polyclonal Antibody (Pab)

Catalog # AP5000e

Specification

CA9 Antibody (Center) - Product Information

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

CA9 Antibody (Center) - Additional Information

Gene ID 768

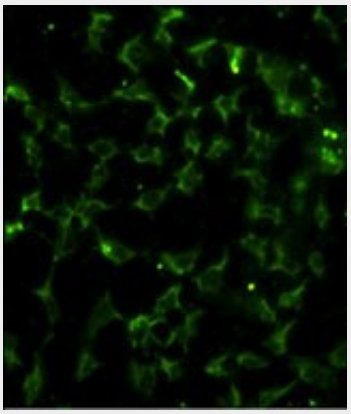
Other Names
Carbonic anhydrase 9, Carbonate dehydratase IX, Carbonic anhydrase IX, CA-IX, CAIX, Membrane antigen MN, P54/58N, Renal cell carcinoma-associated antigen G250, RCC-associated antigen G250, pMW1, CA9, G250, MN

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.

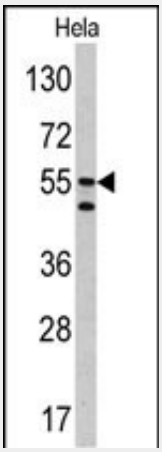
Dilution
IF~~1:10~50
WB~~1:1000
FC~~1:10~50

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.



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



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

10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.622.0609

Precautions
CA9 Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

CA9 Antibody (Center) - Protein Information

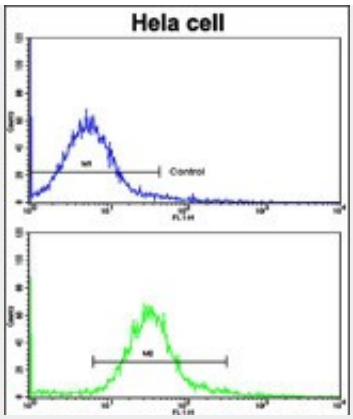
Name CA9

Synonyms G250, MN

Function
Reversible hydration of carbon dioxide. Participates in pH regulation. May be involved in the control of cell proliferation and transformation. Appears to be a novel specific biomarker for a cervical neoplasia.

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



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.

CA9 Antibody (Center) - 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 (Center) - Protocols

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

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

CA9 Antibody (Center) - 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).

CA9 Antibody (Center) - Citations

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

10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.622.0609