

# CA9 Antibody (N-term)

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP5000a

# **Specification**

#### CA9 Antibody (N-term) - Product Information

Application
Primary Accession
Reactivity
Host
Clonality
Isotype
Antigen Region

WB,E
016790
Human
Rabbit
Polyclonal
Rabbit Ig
63-90

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 63-90 amino acids from the N-terminal region of human CA9.

### **Dilution**

WB~~1:2000

#### **Format**

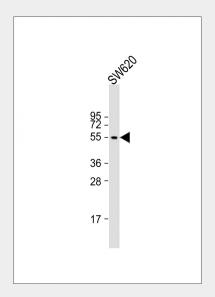
Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is prepared by Saturated Ammonium Sulfate (SAS) precipitation followed by dialysis against PBS.

#### Storage

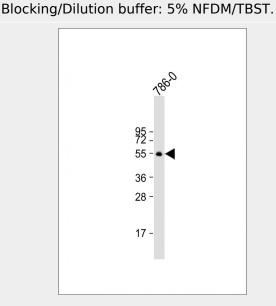
Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

### **Precautions**

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



Anti-CA9 Antibody (N-term) at 1:2000 dilution + SW620 whole cell lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 50 kDa



Anti-CA9 Antibody (N-term) at 1:2000 dilution + 786-0 whole cell lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L),





therapeutic procedures.

CA9 Antibody (N-term) - 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

# CA9 Antibody (N-term) - Protocols

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

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

Peroxidase conjugated at 1/10000 dilution.

Predicted band size: 50 kDa

Blocking/Dilution buffer: 5% NFDM/TBST.

# 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 agueous 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 17g21.2 by fluorescence in situ hybridization, however, radiation hybrid mapping localized it to 9p13-p12.

# 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).