

## Carbonic Anhydrase IX (Renal Cell Marker) Antibody - With BSA and Azide

Mouse Monoclonal Antibody [Clone CA9/781]
Catalog # AH12551

### **Specification**

# Carbonic Anhydrase IX (Renal Cell Marker) Antibody - With BSA and Azide - Product Information

Application ,1,2,3,4,
Primary Accession Q16790
Other Accession 768, 63287
Reactivity Human, Horse
Host Mouse

Clonality Monoclonal

Isotype Mouse / IgG2b, kappa
Calculated MW 55kDa KDa

Carbonic Anhydrase IX (Renal Cell Marker) Antibody - With BSA and Azide - Additional Information

#### Gene ID 768

### **Other Names**

Carbonic anhydrase 9, 4.2.1.1, 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

#### Storage

Store at 2 to 8°C. Antibody is stable for 24 months.

### **Precautions**

Carbonic Anhydrase IX (Renal Cell Marker) Antibody - With BSA and Azide is for research use only and not for use in diagnostic or therapeutic procedures.

# Carbonic Anhydrase IX (Renal Cell Marker) Antibody - With BSA and Azide - 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**

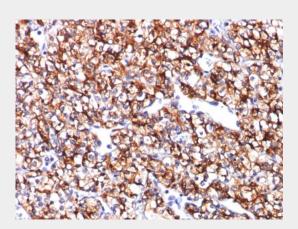
Expressed primarily in carcinoma cells lines. Expression is restricted to very few normal tissues and the most abundant expression is found in the epithelial cells of gastric mucosa

## Carbonic Anhydrase IX (Renal Cell Marker) Antibody - With BSA and Azide - Protocols

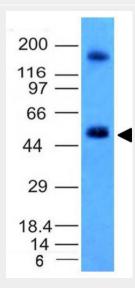
Provided below are standard protocols that you may find useful for product applications.

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

Carbonic Anhydrase IX (Renal Cell Marker) Antibody - With BSA and Azide - Images



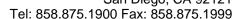
Formalin-fixed, paraffin-embedded human Renal Cell Carcinoma stained with CAIX Monoclonal Antibody (CA9/781).



Western Blot Analysis of HCT116 Cell Lysate using CAIX Monoclonal Antibody (CA9/781).

Carbonic Anhydrase IX (Renal Cell Marker) Antibody - With BSA and Azide - Background







Recognizes a glycoprotein of ~200kDa, identified as carbonic anhydrase IX (CAIX/gp200). Carbonic Anhydrases (CAs) are members of a large family of zinc metallo-enzymes that catalyze the reversible hydration of carbon dioxide. CAs are involved 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 juice. They show extensive diversity in distribution and in their subcellular localization. CA IX is specifically expressed in clear-cell renal carcinomas.

## Carbonic Anhydrase IX (Renal Cell Marker) Antibody - With BSA and Azide - References

Sly, W.S., et al. 1995. Human Carbonic Anhydrases and Carbonic Anhydrase deficiencies. Annu. Rev. Biochem. 64: 375-401