

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 Primary Accession Other Accession Reactivity Host Clonality Isotype Calculated MW WB, IHC, IF, FC <u>016790</u> <u>768</u>, <u>63287</u> Human, Horse Mouse Monoclonal Mouse / IgG2b, kappa 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

Application Note WB~~1:1000<br \>IHC~~1:100~500<br \>IF~~1:50~200<br \>FC~~1:10~50

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.

- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- 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