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

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

Product Information

Application	WB, IHC, IF, FC
Primary Accession	Q16790
Other Accession	768, 63287
Reactivity	Human, Horse
Host	Mouse
Clonality	Monoclonal
Isotype	Mouse / IgG2b, kappa
Clone Names	CA9/781
Calculated MW	49698

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 IHC~~1:100~500 IF~~1:50~200 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.

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

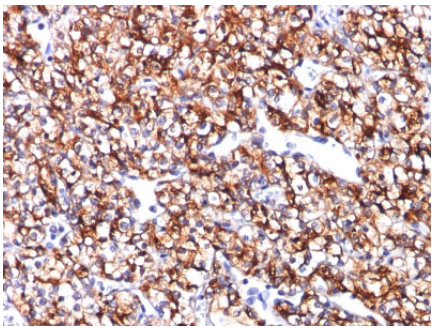
Background

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.

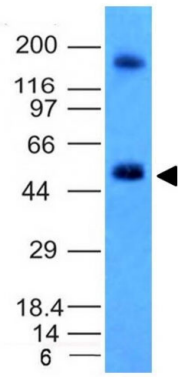
References

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

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).