Product Name: CA IX(12F10)Mouse Monoclonal Antibody
Catalog #: AMM07769

Summary

Production Name	CA IX(12F10)Mouse Monoclonal Antibody
Description	Mouse Monoclonal Antibody
Host	Mouse
Application	WB,IHC-P,IF-P,IF-F,ICC/IF
Reactivity	Human

Performance

Conjugation	Unconjugated
Modification	Unmodified
Isotype	IgG
Clonality	Monoclonal
Form	Liquid
Storage	Store at 4°C short term. Aliquot and store at -20°C long term. Avoid freeze/thaw cycles.
Buffer	PBS, pH 7.4, containing 0.5%BSA, 0.02% New type preservative N as Preservative and 50% Glycerol.
Purification	Affinity purification

Immunogen

Gene Name	CA9
Alternative Names	CA9; G250; MN; 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
Gene ID	768.0
SwissProt ID	Q16790.Synthetic Peptide of CA IX

Application

Dilution Ratio	IF-P/IF-F/ICC/IF 1:50-200, WB 1:3000, IP 1:200, IHC-P 1:50-300
Molecular Weight	38-48kDa

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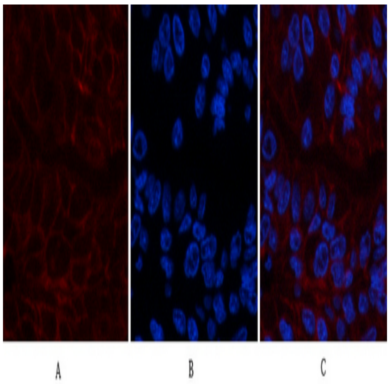
Background

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 is one of only two tumor-associated carbonic anhydrase isoenzymes 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 17q21.2 by fluorescence in situ hybridization, however, radiation hybrid mapping localized it to 9p13-p12. [provided by RefSeq, Jun 2014],catalytic activity:H(2)CO(3) = CO(2) + H(2)O.,cofactor:Zinc.,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.,induction:By hypoxia.,PTM:Asn-346 bears high-mannose type glycan structures.,similarity:Belongs to the alpha-carbonic anhydrase family.,subcellular location:Found on the surface microvilli and in the nucleus, particularly in nucleolus.,subunit:Forms oligomers linked by disulfide bonds.,tissue specificity: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.,

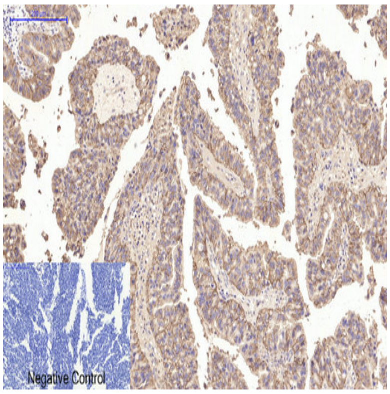
Research Area

Nitrogen metabolism;

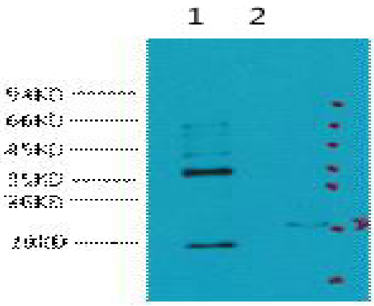
Image Data



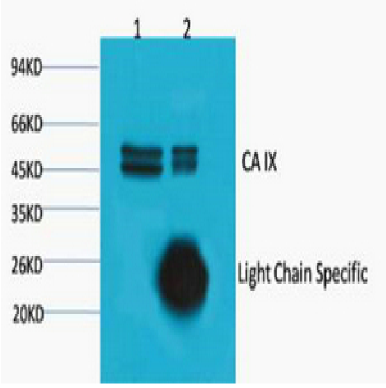
Immunofluorescence analysis of human-liver-cancer tissue. 1,CA IX Monoclonal Antibody（12F10） (red） was diluted at 1:200（4°C,overnight）. 2, Cy3 labled Secondary antibody was diluted at 1:300（room temperature, 50min）.3, Picture B: DAPI（blue） 10min. Picture A:Target. Picture B: DAPI. Picture C: merge of A+B



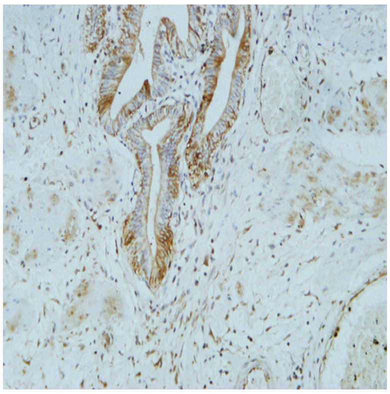
Immunohistochemical analysis of paraffin-embedded Human-lung-cancer tissue. 1,CA IX Monoclonal Antibody（12F10) was diluted at 1:200（4°C,overnight）. 2, Sodium citrate pH 6.0 was used for antibody retrieval（>98°C,20min）. 3,Secondary antibody was diluted at 1:200（room tempeRature, 30min）. Negative control was used by secondary antibody only.



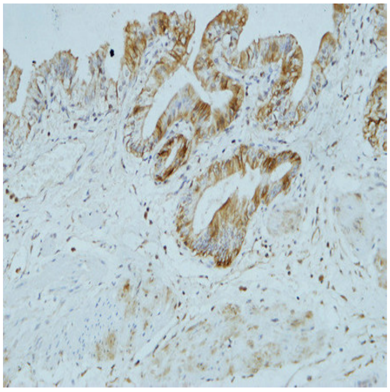
Western blot analysis of 1） Hela, 2） 293T, diluted at 1:5000. cells nucleus extracted by Minute TM Cytoplasmic and Nuclear Fractionation kit （SC-003,Inventbiotech,MN,USA）.



1） Input: Hela Cell Lysate 2） IP product: IP dilute 1:200



Immunohistochemical analysis of paraffin-embedded Human gallbladder. 1, Antibody was diluted at 1:100（4°,overnight）. 2, High-pressure and temperature EDTA, pH8.0 was used for antigen retrieval. 3,Secondary antibody was diluted at 1:200（room temperature, 30min）.



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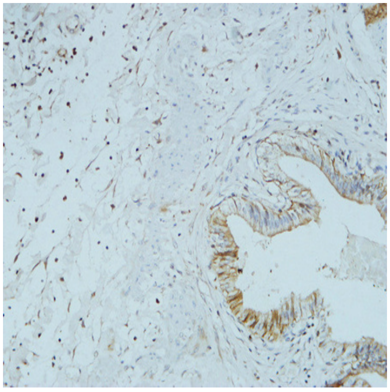

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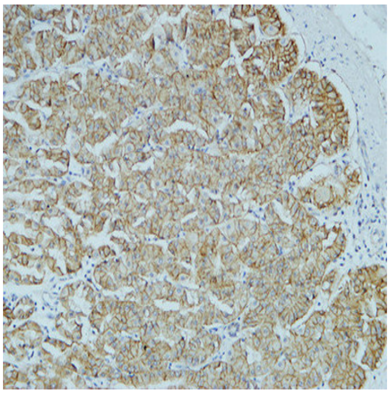
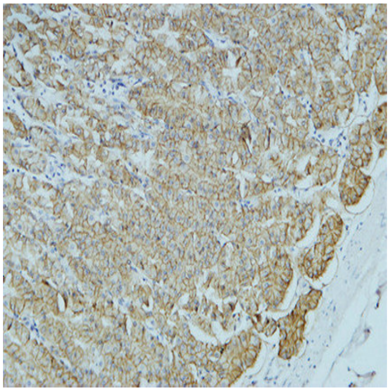


Immunohistochemical analysis of paraffin-embedded Human stomach. 1, Antibody was diluted at 1:100（4°,overnight）. 2, High-pressure and temperature EDTA, pH8.0 was used for antigen retrieval. 3,Secondary antibody was diluted at 1:200（room temperature, 30min）.



Immunohistochemical analysis of paraffin-embedded Human stomach. 1, Antibody was diluted at 1:100（4°,overnight）. 2, High-pressure and temperature EDTA, pH8.0 was used for antigen retrieval. 3,Secondary antibody was diluted at 1:200（room temperature, 30min）.

Note

For research use only.