



CA IX Rabbit mAb

Catalog No	YP-rAb-18047
Isotype	IgG
Reactivity	Human,Mouse,Rat
Applications	WB,IHC,IF,IP,ELISA
Gene Name	CA9
Protein Name	Carbonic anhydrase 9
Purification Process	Protein A
Specificity	Endogenous
Formulation	PBS, 50% glycerol, 0.05% Proclin 300, 0.05%BSA
Source	Monoclonal, Rabbit,IgG
Dilution	IHC 1:200-1000; WB 1:1000-5000; IF 1:200-1000; ELISA 1:5000-20000; IP 1:50-200 Note: For IHC, we suggest antigen retrieval with TE buffer pH 9.0
Concentration	0.5 mg/ml
Purity	≥90%
Storage Stability	-15 ° C to -25 ° C/1 year(Do not lower than -25 ° C)
Synonyms	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
Observed Band	49kD
Calculated Molecular Weight	49kD
Cell Pathway	Membranous
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.
Function	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.,





Background

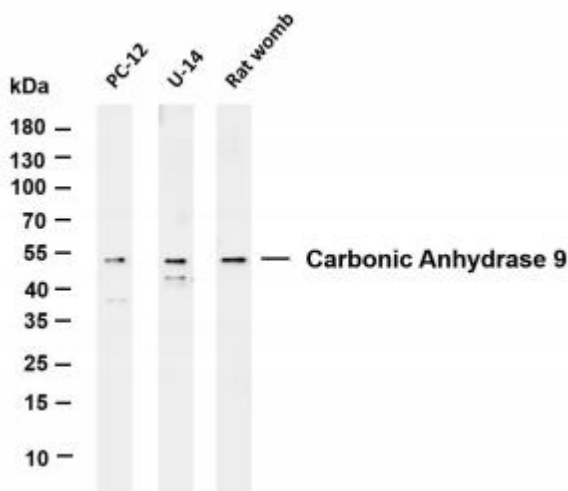
Carbonic anhydrases (CAs) are a large family of zinc metalloenzymes that catalyze the reversible hydration of carbon dioxide. They participate in a variety of biological processes, including respiration, calcification, acid-base balance, bone resorption, and the formation of aqueous humor, cerebrospinal 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],

matters needing attention

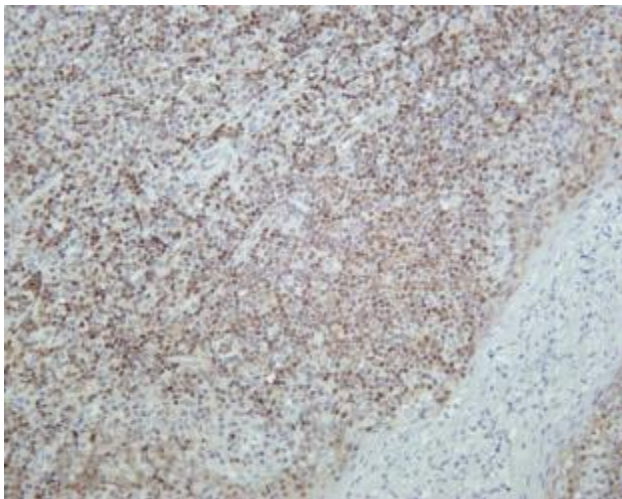
Avoid repeated freezing and thawing!

Usage suggestions

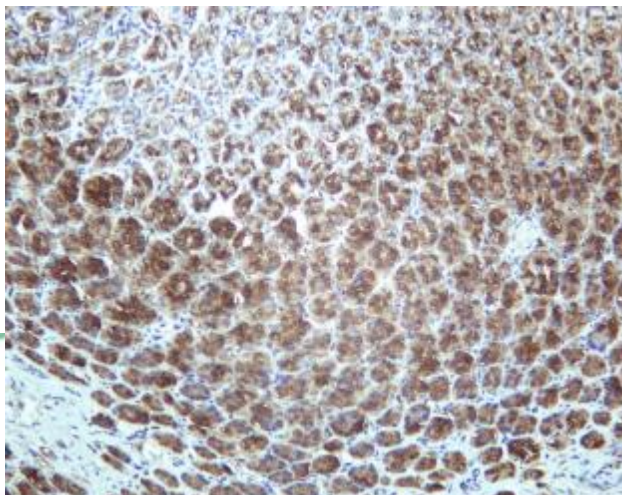
This product can be used in immunological reaction related experiments. For more information, please consult technical personnel.



Various whole cell lysates were separated by 4-20% SDS-PAGE, and the membrane was blotted with anti-Carbonic Anhydrase 9 antibody. The HRP-conjugated Goat anti-Rabbit IgG(H + L) antibody was used to detect the antibody. Lane 1: PC-12 Lane 2: U-14 Lane 3: Rat womb Predicted band size: 49kDa Observed band size: 49kDa

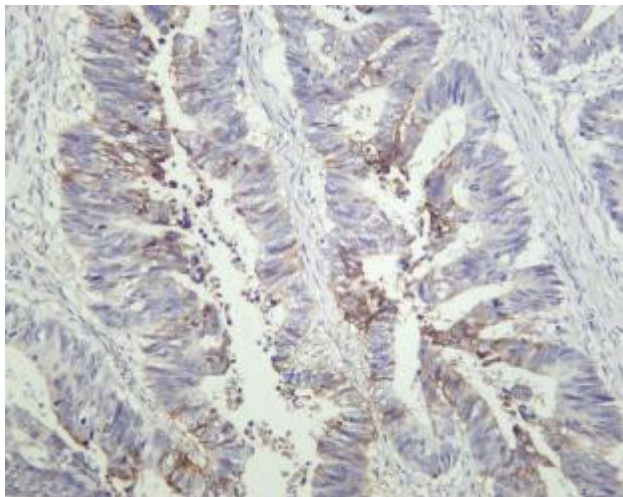


Human tonsil was stained with Anti-Carbonic Anhydrase 9 rabbit antibody

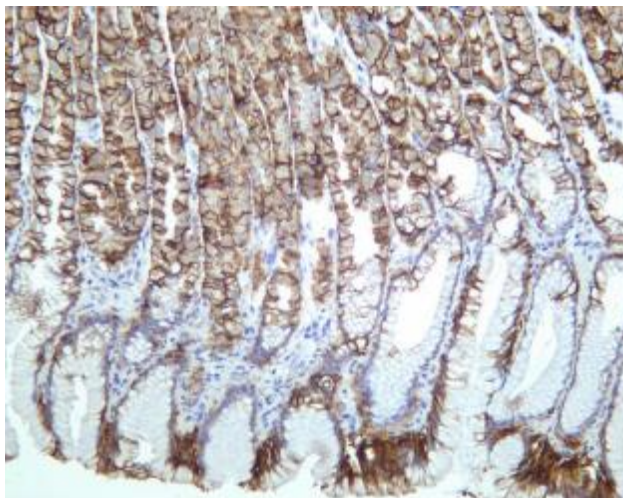


Rat stomach was stained with Anti-Carbonic Anhydrase 9 rabbit antibody





Human colon carcinoma was stained with Anti-Carbonic Anhydrase 9 rabbit antibody



Human stomach was stained with Anti-Carbonic Anhydrase 9 rabbit antibody

