Data Sheet (Cat.No.TMAB-00266)

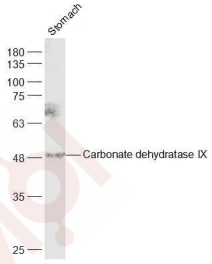
Anti-CA9/Carbonic Anhydrase IX Polyclonal Antibody

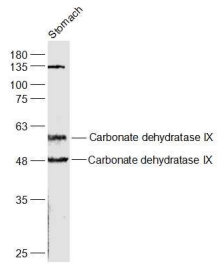
Product Details

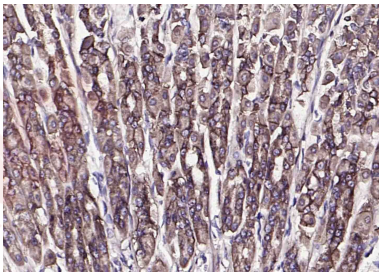
Ig Type:	IgG
Reactivity:	Human,Mouse,Rat (predicted:Dog,Pig,Cow,Horse)
Molecular Weight:	Theoretical: 46 kDa. Actual: 48,58 kDa.
Purification:	Protein A purified

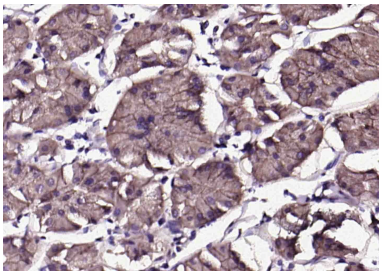
Applications

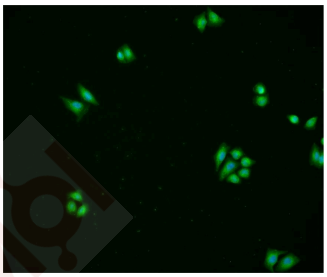
Verified Activity:	1. Sample: Stomach (Mouse) Lysate at 40 µg Primary: Anti-Carbonate dehydratase IX (TMAB-00266) at 1/1000 dilution Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution Predicted band size: 46 kDa Observed band size: 48 kDa 2. Sample: Stomach (Rat) Lysate at 40 µg Primary: Anti-Carbonate dehydratase IX (TMAB-00266) at 1/1000 dilution Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution Predicted band size: 46 kDa Observed band size: 48/58 kDa 3. Paraformaldehyde-fixed, paraffin embedded (rat stomach); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15 min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 min; Blocking buffer (normal goat serum) at 37°C for 30 min; Incubation with (CA9) Polyclonal Antibody, Unconjugated (TMAB-00266) at 1:200 overnight at 4°C, followed by operating according to SP Kit (Rabbit) instructionsand DAB staining. 4. Paraformaldehyde-fixed, paraffin embedded (human stomach); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15 min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 min; Blocking buffer (normal goat serum) at 37°C for 30 min; Incubation with (CA9) Polyclonal Antibody, Unconjugated (TMAB-00266) at 1:200 overnight at 4°C, followed by operating according to SP Kit (Rabbit) instructionsand DAB staining. 5. Hela cell; 4% Paraformaldehyde-fixed; Triton X-100 at room temperature for 20 min; Blocking buffer (normal goat serum) at 37°C for 20 min; Antibody incubation with (CA9) polyclonal Antibody, Unconjugated (TMAB-00266) 1:25, 90 minutes at 37°C; followed by a conjugated Goat Anti-Rabbit IgG antibody at 37°C for 90 minutes, DAPI (blue) was used to stain the cell nucleus.











Application:	ICC/IF,IF,IHC-Fr,IHC-P,WB
Recommended	ICC/IF=1:50-200; IF=1:100-500; IHC-Fr=1:100-500; IHC-P=1:100-500; WB=1:500-2000

Properties

Stability & Storage:	Store at -20°C or -80°C for 12 months. Avoid repeated freeze-thaw cycles.
Shipping:	Shipping with blue ice.

Antigen Details

Immunogen:	KLH conjugated synthetic peptide: human Carbonate dehydratase IX
Antigen Species:	Human
Gene ID:	768
Uniprot ID:	Q16790
Synonyms:	RCC;G250;P54/58N;EC 4.2.1.1;CA9;Carbonic Anhydrase IX;CA-IX;PMW1;CAIX;MN
Biology Area:	Response to hypoxia,Associated Proteins,Vitamins / minerals,Hypoxia,Vitamins / Minerals

Research 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 the only tumor-associated carbonic anhydrase isoenzyme 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, Jul 2008]