



CA VB Polyclonal Antibody

Catalog No	YP-Ab-02514
Isotype	IgG
Reactivity	Human;Mouse;Rat
Applications	WB;IHC;IF;ELISA
Gene Name	CA5B
Protein Name	Carbonic anhydrase 5B mitochondrial
Immunogen	The antiserum was produced against synthesized peptide derived from human CA5B. AA range:241-290
Specificity	CA VB Polyclonal Antibody detects endogenous levels of CA VB protein.
Formulation	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Source	Polyclonal, Rabbit,IgG
Purification	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.
Dilution	Western Blot: 1/500 - 1/2000. Immunohistochemistry: 1/100 - 1/300. Immunofluorescence: 1/200 - 1/1000. ELISA: 1/10000. Not yet tested in other applications.
Concentration	1 mg/ml
Purity	≥90%
Storage Stability	-20°C/1 year
Synonyms	CA5B; Carbonic anhydrase 5B; mitochondrial; Carbonate dehydratase VB; Carbonic anhydrase VB; CA-VB
Observed Band	38kD
Cell Pathway	Mitochondrion.
Tissue Specificity	Strongest expression in heart, pancreas, kidney, placenta, lung, and skeletal muscle. Not expressed in liver.
Function	catalytic activity:H(2)CO(3) = CO(2) + H(2)O.,cofactor:Zinc.,function:Reversible hydration of carbon dioxide.,similarity:Belongs to the alpha-carbonic anhydrase family.,tissue specificity:Strongest expression in heart, pancreas, kidney, placenta, lung, and skeletal muscle. Not expressed in liver.,
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 VB is localized in the mitochondria and shows the highest sequence similarity to the other mitochondrial CA, CA VA. It has a wider tissue distribution than CA VA, which is restricted to the liver. The differences in



tissue distribution suggest that the two mitochondrial carbonic anhydrases evolved to assume different physiologic roles. [provided by RefSeq, Jul 2008],

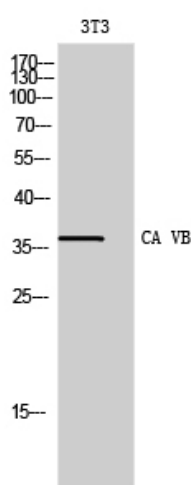
matters needing attention

Avoid repeated freezing and thawing!

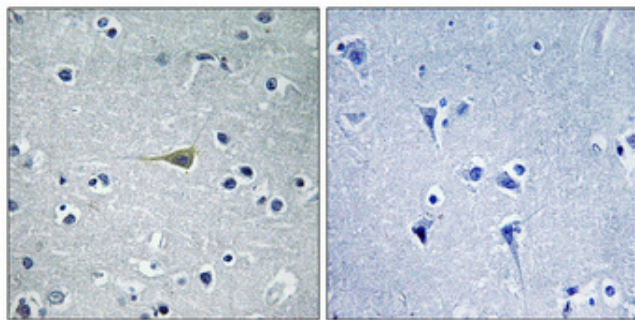
Usage suggestions

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

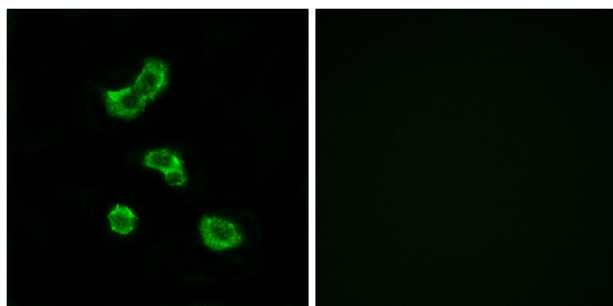
Products Images



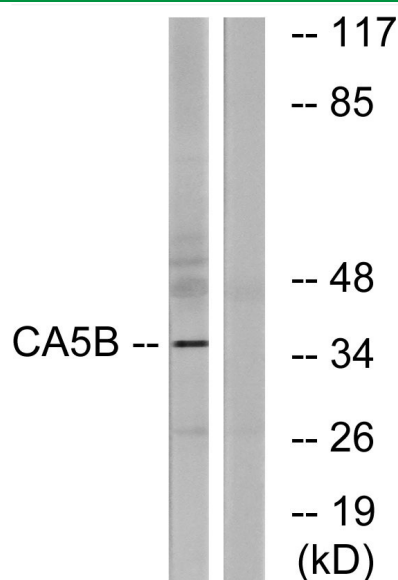
Western Blot analysis of 3T3 cells using CA VB Polyclonal Antibody



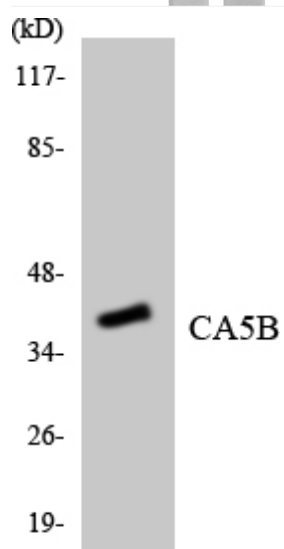
Immunohistochemical analysis of paraffin-embedded Human brain. Antibody was diluted at 1:100 (4° overnight). High-pressure and temperature Tris-EDTA, pH 8.0 was used for antigen retrieval. Negative control (right) obtained from antibody was pre-absorbed by immunogen peptide.



Immunofluorescence analysis of MCF7 cells, using CA5B Antibody. The picture on the right is blocked with the synthesized peptide.



Western blot analysis of lysates from NIH/3T3 cells, using CA5B Antibody. The lane on the right is blocked with the synthesized peptide.



Western blot analysis of the lysates from HT-29 cells using CA5B antibody.