



# CA VB Polyclonal Antibody

<b>Catalog No</b>	BYab-02514
<b>Isotype</b>	IgG
<b>Reactivity</b>	Human;Mouse;Rat
<b>Applications</b>	WB;IHC;IF;ELISA
<b>Gene Name</b>	CA5B
<b>Protein Name</b>	Carbonic anhydrase 5B mitochondrial
<b>Immunogen</b>	The antiserum was produced against synthesized peptide derived from human CA5B. AA range:241-290
<b>Specificity</b>	CA VB Polyclonal Antibody detects endogenous levels of CA VB protein.
<b>Formulation</b>	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
<b>Source</b>	Polyclonal, Rabbit,IgG
<b>Purification</b>	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.
<b>Dilution</b>	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.
<b>Concentration</b>	1 mg/ml
<b>Purity</b>	≥90%
<b>Storage Stability</b>	-20°C/1 year
<b>Synonyms</b>	CA5B; Carbonic anhydrase 5B; mitochondrial; Carbonate dehydratase VB; Carbonic anhydrase VB; CA-VB
<b>Observed Band</b>	38kD
<b>Cell Pathway</b>	Mitochondrion.
<b>Tissue Specificity</b>	Strongest expression in heart, pancreas, kidney, placenta, lung, and skeletal muscle. Not expressed in liver.
<b>Function</b>	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.,
<b>Background</b>	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,

Nanjing BYabscience technology Co.,Ltd



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],

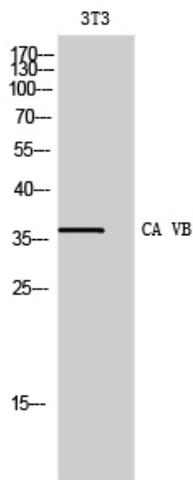
**matters needing attention**

Avoid repeated freezing and thawing!

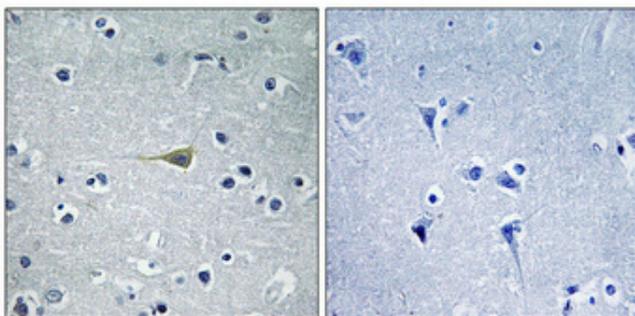
**Usage suggestions**

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

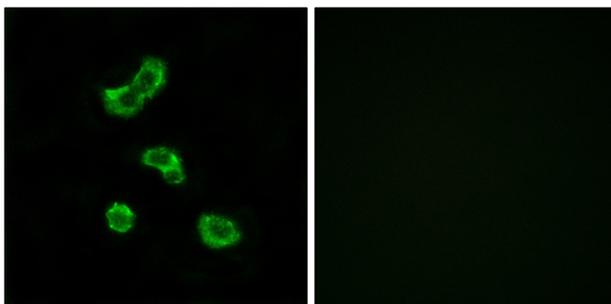
**Products Images**



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

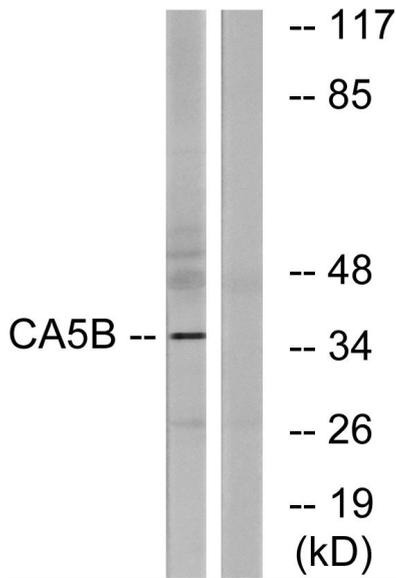


Immunohistochemical analysis of paraffin-embedded Human brain. Antibody was diluted at 1:100(4° overnight). High-pressure and temperature Tris-EDTA,pH8.0 was used for antigen retrieval. Negative contrl (right) obtained from antibody was pre-absorbed by immunogen peptide.

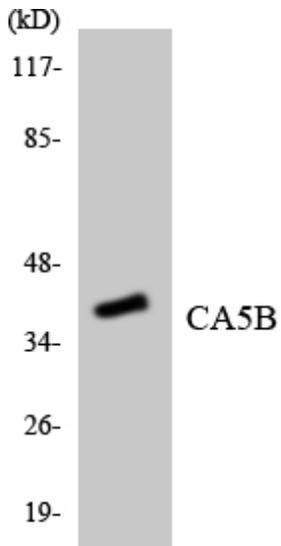


Immunofluorescence analysis of MCF7 cells, using CA5B Antibody. The picture on the right is blocked with the synthesized peptide.

**Nanjing BYabscience technology Co.,Ltd**



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.