

Product Name: CA VB Rabbit Polyclonal Antibody**Catalog #: APRab07771**

For research use only.

Summary

Description	Rabbit polyclonal Antibody
Host	Rabbit
Application	WB,IHC,ICC/IF,ELISA
Reactivity	Human,Mouse,Rat
Conjugation	Unconjugated
Modification	Unmodified
Isotype	IgG
Clonality	Polyclonal
Form	Liquid
Concentration	1mg/ml
Storage	Aliquot and store at -20°C (valid for 12 months). Avoid freeze/thaw cycles.
Shipping	Ice bags
Buffer	Liquid in PBS containing 50% glycerol, 0.5% protective protein and 0.02% New type preservative N.
Purification	Affinity purification

Application

Dilution Ratio	WB 1:500-1:2000,IHC 1:100-1:300,ICC/IF 1:200-1:1000,ELISA 1:5000-1:20000
Molecular Weight	38kDa

Antigen Information

Gene Name	CA5B
Alternative Names	CA5B; Carbonic anhydrase 5B; mitochondrial; Carbonate dehydratase VB; Carbonic anhydrase VB; CA-VB
Gene ID	11238.0
SwissProt ID	Q9Y2D0
Immunogen	The antiserum was produced against synthesized peptide derived from human CA5B. AA range:241-290

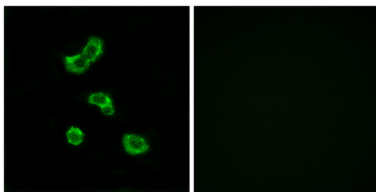
Background

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], catalytic activity: $\text{H}_2\text{CO}_3 = \text{CO}_2 + \text{H}_2\text{O}$, 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.,

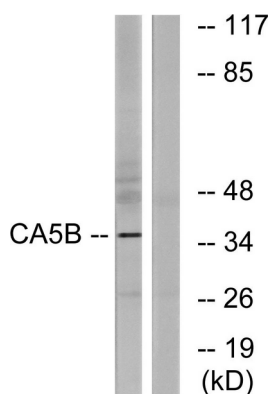
Research Area

Nitrogen metabolism;

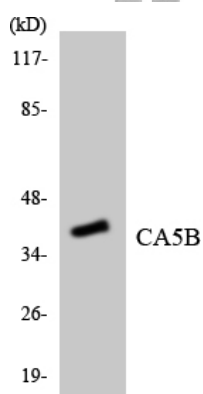
Image Data



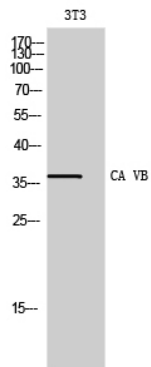
Immunofluorescence analysis of MCF7 cells, using CA5B Antibody. The picture on the right is blocked with the synthesized peptide.



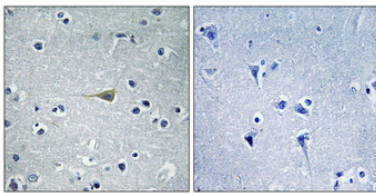
Western blot analysis of lysates from NIH/3T3 cells, using CA5B Antibody. The lane on the right is blocked with the synthesized peptide.



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



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.