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CA5B Antibody (C-term)

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP7308b

Product Information

Application	WB, IHC-P, FC, E
Primary Accession	Q9Y2D0
Other Accession	Q66HG6, Q9QZA0
Reactivity	Human, Mouse
Predicted	Rat, Bovine, Canine, Rabbit, Chicken
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB18377
Calculated MW	36434
Antigen Region	253-283

Additional Information

Gene ID	11238
Other Names	Carbonic anhydrase 5B, mitochondrial, Carbonate dehydratase VB, Carbonic anhydrase VB, CA-VB, CA5B
Target/Specificity	This CA5B antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 253-283 amino acids from the C-terminal region of human CA5B.
Dilution	WB~~1:1000 IHC-P~~1:100~500 FC~~1:10~50 E~~Use at an assay dependent concentration.
Format	Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is prepared by Saturated Ammonium Sulfate (SAS) precipitation followed by dialysis against PBS.
Storage	Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Precautions	CA5B Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	CA5B
Function	Mitochondrial carbonic anhydrase that catalyzes the reversible conversion

of carbon dioxide to bicarbonate/HCO3.

Cellular Location Mitochondrion.

Tissue Location Strongest expression in heart, pancreas, kidney, placenta, lung, and skeletal muscle. Not expressed in liver

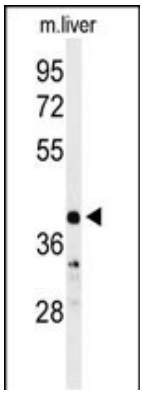
Background

CA5B belongs a large family of zinc metalloenzymes that catalyze the reversible hydration of carbon dioxide. This protein is localized in the mitochondria and shows the highest sequence similarity to the other mitochondrial CA, CA VA. The protein has a wider tissue distribution than CA VA, which is restricted to the liver.

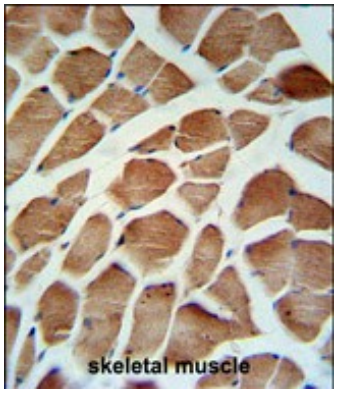
References

Vullo,D., Nishimori,I. Bioorg. Med. Chem. Lett. 17 (5), 1336-1340 (2007)
Shah,G.N. Proc. Natl. Acad. Sci. U.S.A. 97 (4), 1677-1682 (2000)
Fujikawa-Adachi,K. J. Biol. Chem. 274 (30), 21228-21233 (1999)

Images

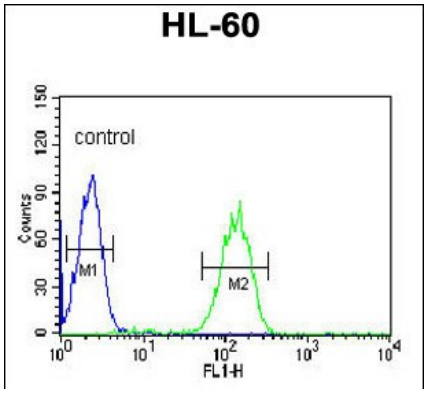


Western blot analysis of CA5B Antibody (C-term) (Cat. #AP7308b) in mouse liver tissue lysates (35ug/lane). CA5B (arrow) was detected using the purified Pab.



CA5B Antibody (C-term) (Cat. #AP7308b) IHC analysis in formalin fixed and paraffin embedded human skeletal muscle followed by peroxidase conjugation of the secondary antibody and DAB staining. This data demonstrates the use of the CA5B Antibody (C-term) for immunohistochemistry. Clinical relevance has not been evaluated.

CA5B Antibody (C-term) (Cat. #AP7308b) flow cytometric analysis of HL-60 cells (right histogram) compared to a negative control cell (left histogram).FITC-conjugated goat-anti-rabbit secondary antibodies were used for the analysis.



Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.