



CA VB (W-13): sc-54765

BACKGROUND

Carbonic anhydrases (CAs) are members of a large family of zinc metalloenzymes responsible for catalyzing the reversible hydration of carbon dioxide. CAs show extensive diversity in their distribution and subcellular localization. They are involved in a variety of biological processes, including calcification, bone resorption, respiration, acid-base balance and the formation of aqueous humor, saliva, gastric juice and cerebrospinal fluid. CA VB, also known as carbonate dehydratase VB, is one of two isoforms of CA V. It localizes to the mitochondria and is involved in metabolic processes. CA VB is predominantly expressed in heart, pancreas, lung, placenta, kidney and skeletal muscle. It exhibits highest homology with family member CA VA (the second isoform of CA V); however, unlike CA VA, it is not expressed in the liver, suggesting that it plays a significantly different physiological role.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: CA5B (human) mapping to Xp21.1; Car5b (mouse) mapping to X F5.

SOURCE

CA VB (W-13) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the N-terminus of CA VB of mouse origin.

PRODUCT

Each vial contains 200 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-54765 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

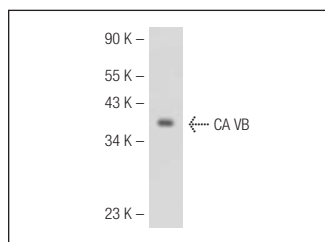
CA VB (W-13) is recommended for detection of CA VB of mouse origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for CA VB siRNA (m): sc-62035; and as shRNA Plasmid control antibody for CA VB shRNA Plasmid (m): sc-62035-SH.

Molecular Weight of CA VB precursor: 36 kDa.

Molecular Weight of mature CA VB: 32 kDa.

DATA



CA VB (W-13): sc-54765. Western blot analysis of CA VB expression in mouse liver tissue extract.

STORAGE

Store at 4° C, ****DO NOT FREEZE****. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

RESEARCH USE

For research use only, not for use in diagnostic procedures.

PROTOCOLS

See our web site at www.scbt.com or our catalog for detailed protocols and support products.