

CA XV (S-17): sc-54773



The Power to Question

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 XV, also referred to as carbonate dehydratase XV or Car15, is a glycosylated glycosylphosphatidylinositol-anchored membrane protein expressed ubiquitously at low levels. CA XV is predominantly expressed in kidney, brain and testis. In humans and chimpanzees, it is a non-processed pseudogene. In mouse, CA XV exhibits highest homology with family member CA IV. CA XV contains three glycosylation sites at asparagine residues 189, 201 and 210.

REFERENCES

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STORAGE

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

CHROMOSOMAL LOCATION

Genetic locus: Car15 (mouse) mapping to 16 A3.

SOURCE

CA XV (S-17) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the N-terminus of CA XV 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-54773 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

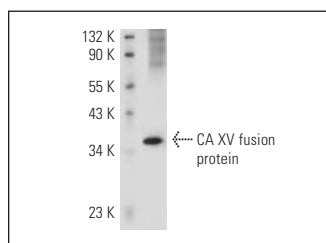
CA XV (S-17) is recommended for detection of CA XV of mouse and rat origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for CA XV siRNA (m): sc-62047; and as shRNA Plasmid control antibody for CA XV shRNA Plasmid (m): sc-62047-SH.

Molecular Weight of glycosylated CA XV: 32-36 kDa.

Molecular Weight of unglycosylated CA XV: 29 kDa.

DATA



CA XV (S-17): sc-54773. Western blot analysis of mouse recombinant CA XV fusion protein.

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.