

CA XIII (Y-16): sc-54770

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 XIII, also referred to as carbonate dehydratase XIII, is predominantly expressed in spleen, prostate, thymus, ovary, testis, colon and small intestine localizing to the cytoplasm. It exhibits highest homology with family members CA I, CA II and CA III. CA XIII may play a role in embryogenesis. Efficient inhibitors of CA XIII activity are sulfanilyl-sulfonamide type inhibitors.

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CHROMOSOMAL LOCATION

Genetic locus: CA13 (human) mapping to 8q21.2.

SOURCE

CA XIII (Y-16) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of CA XIII of human 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-54770 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

CA XIII (Y-16) is recommended for detection of CA XIII of human 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).

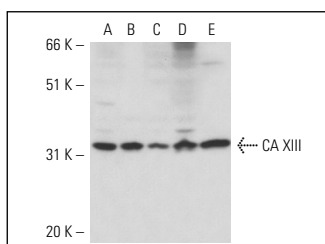
CA XIII (Y-16) is also recommended for detection of CA XIII in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for CA XIII siRNA (h): sc-62044, CA XIII shRNA Plasmid (h): sc-62044-SH and CA XIII shRNA (h) Lentiviral Particles: sc-62044-V.

Molecular Weight of CA XIII: 30 kDa.

Positive Controls: Hep G2 cell lysate: sc-2227, HISM cell lysate: sc-2229 or WiDR cell lysate: sc-24779.

DATA



CA XIII (Y-16): sc-54770. Western blot analysis of CA XIII expression in Hep G2 (A), HISM (B), HS 181.Tes (C), HCT-8 (D) and WiDr (E) whole cell lysates.

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.

MONOS
Satisfaction
Guaranteed

Try **CA XIII (G-11): sc-376753** or **CA XIII (D-8): sc-374517**, our highly recommended monoclonal alternatives to CA XIII (Y-16).