

CA VI (K-16): sc-27890

BACKGROUND

Carbonic anhydrase VI (CA VI) contributes to taste function when secreted in the saliva by protecting taste receptor cells (TRCs) from apoptosis. Functional CA VI exists as a single polypeptide chain tightly bound to one molecule of zinc and containing two N-linked glycosylation sites. Decreased CA VI secretion correlates with loss of taste (hypogeusia) and smell (hyposmia) or distorted taste (dysgeusia) and smell (dysosmia), and altered taste bud morphology. Addition of zinc to individuals experiencing these symptoms has been shown to restore secretion of CA VI to normal levels and normal taste bud morphology in some but not all cases, indicating two different mechanisms leading to CA VI dysfunction.

REFERENCES

1. Thatcher, B.J., et al. 1998. Gustin from human parotid saliva is carbonic anhydrase VI. *Biochem. Biophys. Res. Commun.* 250: 635-641.
2. Henkin, R.I., et al. 1999. Efficacy of exogenous oral zinc in treatment of patients with carbonic anhydrase VI deficiency. *Am. J. Med. Sci.* 318: 392-405.
3. Leinonen, J., et al. 2001. Secretion of carbonic anhydrase isoenzyme VI (CA VI) from human and rat lingual serous von Ebner's glands. *J. Histochem. Cytochem.* 49: 657-662.

CHROMOSOMAL LOCATION

Genetic locus: CA6 (human) mapping to 1p36.23.

SOURCE

CA VI (K-16) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of Carbonic Anhydrase VI 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-27890 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

CA VI (K-16) is recommended for detection of precursor and mature CA VI of human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500), immunohistochemistry (including paraffin-embedded sections) (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 VI siRNA (h): sc-77334, CA VI shRNA Plasmid (h): sc-77334-SH and CA VI shRNA (h) Lentiviral Particles: sc-77334-V.

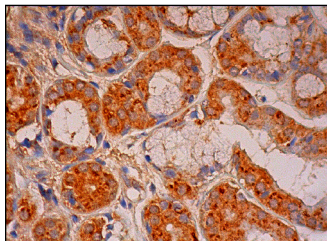
Molecular Weight of CA VI: 33/37 kDa.

Positive Controls: Hep G2 cell lysate: sc-2227.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunofluorescence: use donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941. 3) Immunohistochemistry: use ImmunoCruz™: sc-2053 or ABC: sc-2023 goat IgG Staining Systems.

DATA



CA VI (K-16): sc-27890. Immunoperoxidase staining of formalin fixed, paraffin-embedded human salivary gland tissue showing cytoplasmic staining of glandular cells.

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.

MONOS
Satisfaction
Guaranteed

Try **CA VI (F-12): sc-166679**, our highly recommended monoclonal alternative to CA VI (K-16).