

CTL2 (H-96): sc-292132

BACKGROUND

Choline is an essential nutrient that is required for the synthesis of both acetylcholine, a neurotransmitter found in cholinergic nerve terminals, and phosphatidylcholine, a key component of cell membranes. Choline deficiencies are associated with defects in cell growth and have been implicated in disorders such as Alzheimer's and Parkinson's disease. The choline transporter-like protein family (CTL) are solute carriers that transport choline, a compound which is not able to permeate cells, across the cell membrane. CTL2, also called SLC44A2 (solute carrier family 44 member 2), is a multi-pass membrane protein expressed in cells of the inner ear. CTL2 is a possible candidate for autoimmune hearing loss in humans.

REFERENCES

1. O'Regan, S., et al. 2000. An electric lobe suppressor for a yeast choline transport mutation belongs to a new family of transporter-like proteins. *Proc. Natl. Acad. Sci. USA* 97: 1835-1840.
2. Nair, T.S., et al. 2004. Identification and characterization of choline transporter-like protein 2, an inner ear glycoprotein of 68 and 72 kDa that is the target of antibody-induced hearing loss. *J. Neurosci.* 24: 1772-1779.

CHROMOSOMAL LOCATION

Genetic locus: SLC44A2 (human) mapping to 19p13.2; Slc44a2 (mouse) mapping to 9 A3.

SOURCE

CTL2 (H-96) is a rabbit polyclonal antibody raised against amino acids 336-431 mapping within an internal region of CTL2 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.

APPLICATIONS

CTL2 (H-96) is recommended for detection of CTL2 of mouse, rat and 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).

CTL2 (H-96) is also recommended for detection of CTL2 in additional species, including equine, canine and bovine.

Suitable for use as control antibody for CTL2 siRNA (h): sc-62163, CTL2 siRNA (m): sc-62164, CTL2 shRNA Plasmid (h): sc-62163-SH, CTL2 shRNA Plasmid (m): sc-62164-SH, CTL2 shRNA (h) Lentiviral Particles: sc-62163-V and CTL2 shRNA (m) Lentiviral Particles: sc-62164-V.

Molecular Weight of nascent CTL2: 68 kDa.

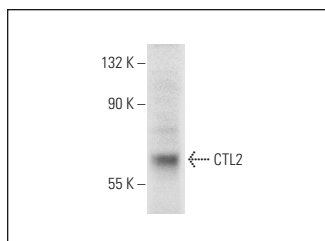
Molecular Weight of glycosylated CTL2: 72 kDa.

Positive Controls: Jurkat whole cell lysate: sc-2204 or K-562 whole cell lysate: sc-2203.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (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) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

DATA



CTL2 (H-96): sc-292132. Western blot analysis of CTL2 expression in K-562 whole cell lysate.

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 **CTL2 (F7): sc-101266**, our highly recommended monoclonal alternative to CTL2 (H-96).