

# CTL2 (A-20): sc-68041

## 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.

## CHROMOSOMAL LOCATION

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

## SOURCE

CTL2 (A-20) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an extracellular domain 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.

Blocking peptide available for competition studies, sc-68041 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## STORAGE

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

## APPLICATIONS

CTL2 (A-20) 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), 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).

CTL2 (A-20) is also recommended for detection of CTL2 in additional species, including equine, canine, bovine and porcine.

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.

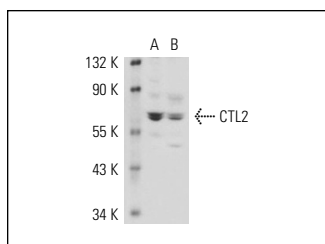
Molecular Weight of glycosylated CTL2: 72 kDa.

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

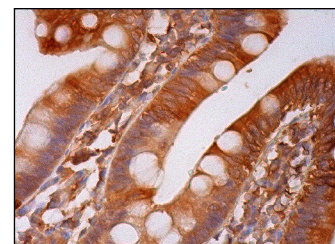
## RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use 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) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) 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. 4) Immunohistochemistry: use ImmunoCruz™: sc-2053 or ABC: sc-2023 goat IgG Staining Systems.

## DATA



CTL2 (A-20): sc-68041. Western blot analysis of CTL2 expression in Jurkat (A) and K-562 (B) whole cell lysates.



CTL2 (A-20): sc-68041. Immunoperoxidase staining of formalin fixed, paraffin-embedded human small intestine tissue showing membrane and cytoplasmic staining of glandular cells.

## RESEARCH USE

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

## PROTOCOLS

See our web site at [www.scbt.com](http://www.scbt.com) or our catalog for detailed protocols and support products.



Try **CTL2 (F7): sc-101266**, our highly recommended monoclonal alternative to CTL2 (A-20).