

CLCC1 (E-14): sc-131897

BACKGROUND

Chloride channels (CLCs) regulate cellular traffic of chloride ions, a critical component of all living cells. CLCs are involved in membrane potential stabilization, signal transduction, cell volume regulation and organic solute transport. CLCC1 (chloride channel CLIC-like protein 1), also known as MCLC (Mid-1-related chloride channel) or KIAA0761, is a 551 amino acid multi-pass membrane protein that belongs to the chloride channel MCLC family. CLCC1 is related to the *Saccharomyces cerevisiae* protein Mid-1 and is believed to function as an intracellular chloride channel that is expressed in lung, brain, muscle, liver and testis. Localizing to intracellular compartments such as the Golgi apparatus, the endoplasmic reticulum (ER) and the nuclear envelope, CLCC1 is expressed as four isoforms due to alternative splicing events, namely hMCLC-1, hMCLC-2, hMCLC-3 and hMCLC-4.

REFERENCES

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2. Nagasawa, M., et al. 2001. Identification of a novel chloride channel expressed in the endoplasmic reticulum, Golgi apparatus, and nucleus. J. Biol. Chem. 276: 20413-20418.
3. Li, X., et al. 2002. Chloride channels and hepatocellular function: prospects for molecular identification. Annu. Rev. Physiol. 64: 609-633.
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CHROMOSOMAL LOCATION

Genetic locus: CLCC1 (human) mapping to 1p13.3; Clcc1 (mouse) mapping to 3 F3.

SOURCE

CLCC1 (E-14) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of CLCC1 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-131897 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

CLCC1 (E-14) is recommended for detection of CLCC1 isoforms 1-4 of mouse, rat and 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) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

CLCC1 (E-14) is also recommended for detection of CLCC1 isoforms 1-4 in additional species, including canine and porcine.

Suitable for use as control antibody for CLCC1 siRNA (h): sc-78968, CLCC1 siRNA (m): sc-142373, CLCC1 shRNA Plasmid (h): sc-78968-SH, CLCC1 shRNA Plasmid (m): sc-142373-SH, CLCC1 shRNA (h) Lentiviral Particles: sc-78968-V and CLCC1 shRNA (m) Lentiviral Particles: sc-142373-V.

Molecular Weight of CLCC1: 62 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.

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.