

# CLCC1 (P-20): sc-101919

## 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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- Furukawa, T. 2003. Various functions of ClC-type Cl<sup>-</sup> channels. Nippon Yakurigaku Zasshi 122: 375-383.
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- Vandewalle, A. 2007. Expression and function of CLC and cystic fibrosis transmembrane conductance regulator chloride channels in renal epithelial tubule cells: pathophysiological implications. Chang Gung Med. J. 30: 17-25.

## CHROMOSOMAL LOCATION

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

## SOURCE

CLCC1 (P-20) is a purified rabbit polyclonal antibody raised against CLCC1 of human origin.

## STORAGE

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

## PRODUCT

Each vial contains 100 µg IgG in 1.0 ml PBS with < 0.1% sodium azide, 0.1% gelatin and < 0.02% sucrose.

## APPLICATIONS

CLCC1 (P-20) is recommended for detection of CLCC1 of mouse, rat, human and dog 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).

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.

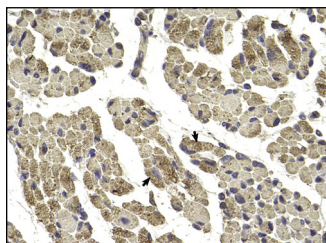
Molecular Weight of CLCC1: 62 kDa.

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

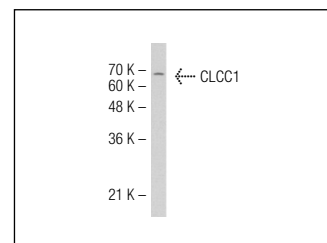
## RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use 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) 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. 3) Immunohistochemistry: use ImmunoCruz™: sc-2051 or ABC: sc-2018 rabbit IgG Staining Systems.

## DATA



CLCC1 (P-20): sc-101919. Immunoperoxidase staining of formalin fixed, paraffin-embedded human muscle tissue showing cytoplasmic staining.



CLCC1 (P-20): sc-101919. Western blot analysis of CLCC1 expression in Hep G2 whole cell lysate.

## RESEARCH USE

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