

Clca3 (M-53): sc-67158

BACKGROUND

The calcium-activated chloride channel (CLCA) protein family, which includes the human homologs CLCA1 and CLCA2, display distinct tissue distribution patterns. CLCA1 is expressed as a precursor protein that is processed into two cell surface associated subunits and a group of proteins. CLCA1 is upregulated by interleukin-9 and regulates the expression of mucins. CLCA1 may provide a therapeutic target to control mucus overproduction in airway disease patients with cystic fibrosis. CLCA2 expression is downregulated in breast cancer, therefore CLCA2 is thought to act as a tumor suppressor in normal cells. CLCA3 (known as Clca3 in mouse) is a structurally divergent member of the CLCA family that does not function as a channel protein. CLCA4 is a CLCA member that is expressed in human rectal mucosa, CLCA5 shows strong expression in eye and spleen, and CLCA6 is primarily expressed in intestine and stomach.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: Clca3 (mouse) mapping to 3 H2.

SOURCE

Clca3 (M-53) is a rabbit polyclonal antibody raised against amino acids 861-913 mapping at the C-terminus of Clca3 of mouse origin.

PRODUCT

Each vial contains 200 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

APPLICATIONS

Clca3 (M-53) is recommended for detection of CLCA3 of mouse and, to a lesser extent, rat 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).

Suitable for use as control antibody for Clca3 siRNA (m): sc-77384, Clca3 shRNA Plasmid (m): sc-77384-SH and Clca3 shRNA (m) Lentiviral Particles: sc-77384-V.

Molecular Weight of Clca3: 100 kDa.

Molecular Weight of glycosylated Clca3: 110 kDa.

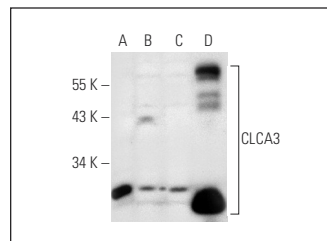
Molecular Weight of cleaved Clca3: 35/75 kDa.

Positive Controls: NIH/3T3 whole cell lysate: sc-2210, AMJ2-C8 whole cell lysate: sc-364366 or mouse small intestine extract: sc-364252.

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



CLCA3 (M-53): sc-67158. Western blot analysis of CLCA3 expression in HISM (A), NIH/3T3 (B) and AMJ2-C8 (C) whole cell lysates and mouse small intestine tissue extract (D).

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.