# CLIC5 (B-23): sc-133468



The Power to Question

#### **BACKGROUND**

Chloride intracellular channel 5 (CLIC5), is a member of the highly conserved family of chloride ion channels that function in both soluble and integral membrane forms. Chloride channels regulate cellular traffic of chloride ions, a critical component of all living cells. They are involved in membrane potential stabilization, signal transduction, cell volume regulation and organic solute transport. CLIC5 associates with Actin-based cytoskeletal structures and may be involved in their assembly and maintenance. In addition, CLIC5 may also play an important role in inner ear function localizing to the stereocilia and possibly associating with Radixin. Two CLIC5 isoforms exist and they are referred to as CLIC5A and CLIC5B. The two isoforms share an identical C-terminus but have distinct N-terminal sequences. CLIC5B is the human ortholog of bovine p64 and avian p62. It binds AKAP350 and localizes to the Golgi apparatus.

## **REFERENCES**

- Berryman, M. and Bretscher, A. 2000. Identification of a novel member of the chloride intracellular channel gene family (CLIC5) that associates with the Actin cytoskeleton of placental microvilli. Mol. Biol. Cell 11: 1509-1521.
- Rønnov-Jessen, L., et al. 2002. Differential expression of a chloride intracellular channel gene, CLIC4, in transforming growth factor-β1-mediated conversion of fibroblasts to myofibroblasts. Am. J. Pathol. 161: 471-480.

#### CHROMOSOMAL LOCATION

Genetic locus: CLIC5 (human) mapping to 6p12.3.

#### SOURCE

CLIC5 (B-23) is a Protein A purified rabbit polyclonal antibody raised against synthetic CLIC5 peptide of human origin.

## **PRODUCT**

Each vial contains 100  $\mu g$  lgG in 1.0 ml PBS with < 0.1% sodium azide, 0.1% gelatin and < 0.02% sucrose.

#### **APPLICATIONS**

CLIC5 (B-23) is recommended for detection of CLIC5 of 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).

Suitable for use as control antibody for CLIC5 siRNA (h): sc-62128, CLIC5 shRNA Plasmid (h): sc-62128-SH and CLIC5 shRNA (h) Lentiviral Particles: sc-62128-V.

Molecular Weight of CLIC5A: 32 kDa.

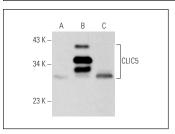
Molecular Weight of CLIC5B: 46 kDa.

Positive Controls: CLIC5 (h): 293T Lysate: sc-173628, Jurkat whole cell lysate: sc-2204 or JAR cell lysate: sc-2276.

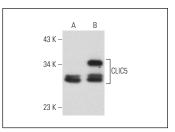
#### **RECOMMENDED SECONDARY REAGENTS**

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. 4) Immunohistochemistry: use ImmunoCruz™: sc-2051 or ABC: sc-2018 rabbit IgG Staining Systems.

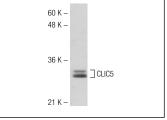
#### **DATA**



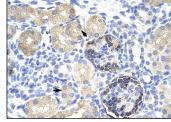
CLIC5 (B-23): sc-133468. Western blot analysis of CLIC5 expression in non-transfected 293T: sc-117752 (A), human CLIC5 transfected 293T: sc-173628 (B) and JAR (C) whole cell lysates.



CLIC5 (B-23): sc-133468. Western blot analysis of CLIC5 expression in non-transfected: sc-117752 (A) and humar CLIC5 transfected: sc-173684 (B) 293T whole cell lysates



CLIC5 (B-23): sc-133468. Western blot analysis of CLIC5 expression in Jurkat whole cell lysate.



CLIC5 (B-23): sc-133468. Immunoperoxidase staining of formalin-fixed, paraffin-embedded human kidney tissue showing cytoplasmic localization.

#### **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.



Try **CLIC4/5/6 (A-11)**: **sc-271863**, our highly recommended monoclonal alternative to CLIC5 (B-23).