# CLIC4/5/6 (H-70): sc-135031



The Power to Question

## **BACKGROUND**

CLIC4 (chloride intracellular channel 4), also known as H1, huH1, p64H1, CLIC4L or MTCLIC, is a 253 amino acid single-pass membrane protein that localizes to both nucleus and cytoplasm and contains one GST C-terminal domain. Expressed in placenta, heart and skeletal muscle, as well as in epithelial cells from kidney, colon and esophageal tissue, CLIC4 functions as a monomer that is able to form selective ion channels in target proteins, thereby facilitating the transport of chloride and other ions. CLIC5 (chloride intracellular channel 5) functions in both soluble and integral membrane forms and associates with actin-based cytoskeletal structures, suggesting involvement in their assembly and maintenance. In addition, CLIC5 may play an important role in inner ear function localizing to the stereocilia and possibly associating with Radixin. CLIC6 (chloride intracellular channel 6) is believed to play a critical role in water-secreting cells, possibly through the regulation of chloride ion transport. The CLIC6 gene is a rare example of large-scale segmental paralogy in which a large (approximately 500 kb) segment on human chromosome (HC) 21 (21g22) is triplicated on HC 1 and HC 6. CLIC6 is also known to interact with dopamine receptors DRD2, DRD3 and DRD4. CLIC6 is primarily expressed in the cytoplasm, however, upon chloride ion efflux from the cell, CLIC6 is translocated to the plasma membrane. CLIC6 has been identified in brain, placenta, pancreas and liver.

## **SOURCE**

CLIC4/5/6 (H-70) is a rabbit polyclonal antibody raised against amino acids 181-250 mapping within an internal region of CLIC5 of human origin.

#### **PRODUCT**

Each vial contains 200  $\mu g$  lgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

## **STORAGE**

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

## **APPLICATIONS**

CLIC4/5/6 (H-70) is recommended for detection of CLIC4, CLIC5, CLIC6, and, to a lesser extent, CLIC1 and CLIC2 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) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

CLIC4/5/6 (H-70) is also recommended for detection of CLIC4, CLIC5, CLIC6, and, to a lesser extent, CLIC1 and CLIC2 in additional species, including equine, canine, bovine, porcine and avian.

Molecular Weight of CLIC4: 29 kDa.

Molecular Weight of CLIC5: 32 kDa.

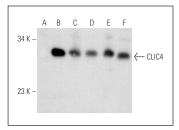
Molecular Weight of CLIC6: 71 kDa.

Positive Controls: CLIC4 (h): 293 Lysate: sc-113014, SK-N-MC cell lysate: sc-2237 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.

## **DATA**



CLIC4/5/6 (H-70): sc-135031. Western blot analysis of CLIC4 expression in non-transfected 293T: sc-117752 (A), human CLIC4 transfected 293T: sc-113014 (B), SK-N-MC (C), JAR (D), Raji (E) and U-251-MG (F) whole cell bester

## **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.



Try CLIC4/5/6 (A-11): sc-271863 or CLIC4 (45.42): sc-135739, our highly recommended monoclonal alternatives to CLIC4/5/6 (H-70).

Santa Cruz Biotechnology, Inc. 1.800.457.3801 831.457.3800 fax 831.457.3801 Europe +00800 4573 8000 49 6221 4503 0 www.scbt.com