

# CLIC (N-13): sc-65034

## BACKGROUND

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. CLICs (chloride intracellular channel proteins) comprise a highly conserved family of chloride ion channels that function in both soluble and integral membrane forms. CLIC1 is a monomeric protein that contains a redox-active site similar to glutaredoxin; it functions as a anion-selective channel. CLIC4 localizes to the mitochondria and cytoplasm and is regulated by p53 and TNF $\alpha$ . Under cellular stress, CLIC4 translocates to the nucleus and plays a role in cell cycle arrest and apoptosis. CLIC5 associates with actin-based cytoskeletal structures and may be involved in their assembly and maintenance. CLIC6 plays a critical role in water-secreting cells, possibly through the regulation of chloride ion transport.

## SOURCE

CLIC (N-13) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the N-terminus of CLIC4 of human origin.

## PRODUCT

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

Blocking peptide available for competition studies, sc-65034 P, (100  $\mu$ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## STORAGE

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

## APPLICATIONS

CLIC (N-13) is recommended for detection of CLIC1, CLIC4, CLIC5 and CLIC6 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2  $\mu$ g per 100-500  $\mu$ g 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); also recommended for detection of CLIC2 of human and rat origin; may cross-react with CLIC3.

CLIC (N-13) is also recommended for detection of CLIC1, CLIC4, CLIC5 and CLIC6 in additional species, including equine, canine, bovine, porcine and avian.

Molecular Weight of CLIC1: 27 kDa.

Molecular Weight of mitochondrial CLIC4: 28 kDa.

Molecular Weight of nuclear CLIC4: 31 kDa.

Molecular Weight of CLIC5A: 32 kDa.

Molecular Weight of CLIC5B: 46 kDa.

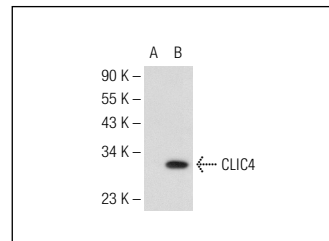
Molecular Weight of CLIC6: 71 kDa.

Positive Controls: CLIC4 (h): 293 Lysate: sc-113014 or mouse spleen extract: sc-2391.

## 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) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) 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.

## DATA



CLIC (N-13): sc-65034. Western blot analysis of CLIC4 expression in non-transfected: sc-110760 (A) and human CLIC4 transfected: sc-113014 (B) 293 whole cell lysates.

## RESEARCH USE

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

## PROTOCOLS

See our web site at [www.scbt.com](http://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 CLIC (N-13).