

CLIC (C-16): sc-65033

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 α . 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.

REFERENCES

1. Suh, K.S., et al. 2004. The organellular chloride channel protein CLIC4/mtCLIC translocates to the nucleus in response to cellular stress and accelerates apoptosis. *J. Biol. Chem.* 279: 4632-4641.
2. Suh, K.S., et al. 2005. CLIC4, an intracellular chloride channel protein, is a novel molecular target for cancer therapy. *J. Investig. Dermatol. Symp. Proc.* 10: 105-109.

SOURCE

CLIC (C-16) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the C-terminus of CLIC4 of human origin.

PRODUCT

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

Blocking peptide available for competition studies, sc-65033 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

CLIC (C-16) is recommended for detection of CLIC4, CLIC5 and CLIC6 of mouse, rat, human, and, to a lesser extent, hamster origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 μ g per 100-500 μ 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). CLIC (C-16) is also recommended for detection of CLIC4, CLIC5 and CLIC6 in additional species, including equine, canine, bovine, porcine and avian.

Molecular Weight of CLIC4: 28 kDa.

Molecular Weight of nuclear CLIC4: 31 kDa.

Molecular Weight of CLIC5A: 32 kDa.

Molecular Weight of CLIC5B: 46 kDa.

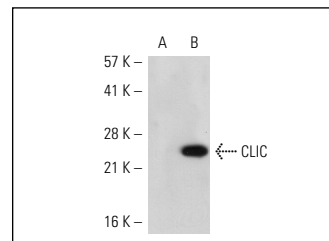
Molecular Weight of CLIC6: 71 kDa.

Positive Controls: CLIC4 (h): 293 Lysate: sc-113014.

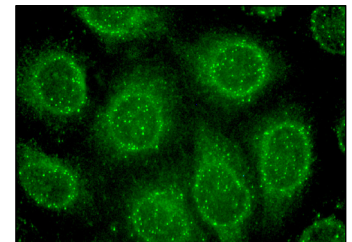
RECOMMENDED SECONDARY REAGENTS

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 (C-16): sc-65033. Western blot analysis of CLIC expression in non-transfected: sc-110760 (A) and human CLIC transfected: sc-113014 (B) 293 whole cell lysates.



CLIC (C-16): sc-65033. Immunofluorescence staining of methanol-fixed HeLa cells showing nuclear and 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.

PROTOCOLS

See our web site at www.scbt.com or our catalog for detailed protocols and support products.

MONOS
Satisfaction
Guaranteed

Try **CLIC4/5/6 (A-11): sc-271863** or **CLIC4 (45.42): sc-135739**, our highly recommended monoclonal alternatives to CLIC (C-16).