

CLIC4 (U-100): sc-130723

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 the nucleus and the 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. The gene encoding CLIC4 maps to human chromosome 1, which spans 260 million base pairs, contains over 3,000 genes and comprises nearly 8% of the human genome. Chromosome 1 houses a large number of disease-associated genes, including those that are involved in familial adenomatous polyposis, Stickler syndrome, Parkinson's disease, Gaucher disease, schizophrenia and Usher syndrome. Aberrations in chromosome 1 are found in a variety of cancers, including head and neck cancer, malignant melanoma and multiple myeloma.

REFERENCES

1. Edwards, J.C. 1999. A novel p64-related Cl⁻ channel: subcellular distribution and nephron segment-specific expression. *Am. J. Physiol.* 276: F398-F408.
2. Fernández-Salas, E., et al. 1999. p53 and tumor necrosis factor α regulate the expression of a mitochondrial chloride channel protein. *J. Biol. Chem.* 274: 36488-36497.
3. Chuang, J.Z., et al. 1999. A 29 kDa intracellular chloride channel p64H1 is associated with large dense-core vesicles in rat hippocampal neurons. *J. Neurosci.* 19: 2919-2928.
4. Fernández-Salas, E., et al. 2002. mtCLIC/CLIC4, an organellar chloride channel protein, is increased by DNA damage and participates in the apoptotic response to p53. *Mol. Cell. Biol.* 22: 3610-3620.
5. Bohman, S., et al. 2005. Proteomic analysis of vascular endothelial growth factor-induced endothelial cell differentiation reveals a role for chloride intracellular channel 4 (CLIC4) in tubular morphogenesis. *J. Biol. Chem.* 280: 42397-42404.

CHROMOSOMAL LOCATION

Genetic locus: CLIC4 (human) mapping to 1p36.11.

SOURCE

CLIC4 (U-100) is a purified rabbit polyclonal antibody raised against recombinant CLIC4 of human origin.

PRODUCT

Each vial contains 100 μ g IgG in 1.0 ml 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 (U-100) is recommended for detection of CLIC4 of human 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), 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 CLIC4 siRNA (h): sc-105213, CLIC4 shRNA Plasmid (h): sc-105213-SH and CLIC4 shRNA (h) Lentiviral Particles: sc-105213-V.

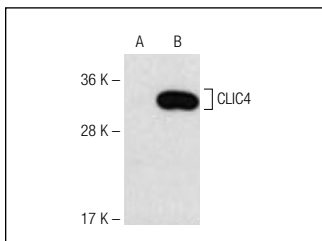
Molecular Weight of CLIC4: 29 kDa.

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

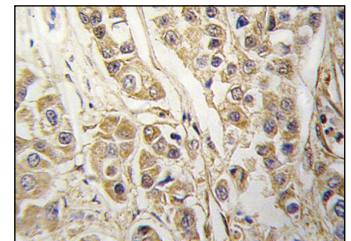
RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use 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



CLIC4 (U-100): sc-130723. Western blot analysis of CLIC4 expression in non-transfected (A) and human CLIC4 transfected (B) 293 whole cell lysates.



CLIC4 (U-100): sc-130723. Immunoperoxidase staining of formalin-fixed, paraffin-embedded human breast carcinoma tissue showing cytoplasmic localization.

RESEARCH USE

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

MONOS
Satisfaction
Guaranteed

Try **CLIC4/5/6 (A-11): sc-271863** or **CLIC4 (45.42): sc-135739**, our highly recommended monoclonal alternatives to CLIC4 (U-100).