

CLIC5B (D-10): sc-514066

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, CLIC5A and CLIC5B, which share an identical C-terminus but have distinct N-terminal sequences. CLIC5B is the human ortholog of cow p64 and bird p62. It binds AKAP 350 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.
- Rønnev-Jessen, L., et al. 2002. Differential expression of a chloride intracellular channel gene, CLIC4, in transforming growth factor- β 1-mediated conversion of fibroblasts to myofibroblasts. *Am. J. Pathol.* 161: 471-480.
- Shanks, R.A., et al. 2002. AKAP 350 at the Golgi apparatus. II. Association of AKAP 350 with a novel chloride intracellular channel (CLIC) family member. *J. Biol. Chem.* 277: 40973-40980.
- Friedli, M., et al. 2003. Identification of a novel member of the CLIC family, CLIC6, mapping to 21q22.12. *Gene* 320: 31-40.

CHROMOSOMAL LOCATION

Genetic locus: CLIC5 (human) mapping to 6p21.1.

SOURCE

CLIC5B (D-10) is a mouse monoclonal antibody specific for an epitope mapping between amino acids 30-54 near the N-terminus of CLIC5B of human origin.

PRODUCT

Each vial contains 200 μ g IgG₁ kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

CLIC5B (D-10) is available conjugated to agarose (sc-514066 AC), 500 μ g/0.25 ml agarose in 1 ml, for IP; to HRP (sc-514066 HRP), 200 μ g/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-514066 PE), fluorescein (sc-514066 FITC), Alexa Fluor[®] 488 (sc-514066 AF488), Alexa Fluor[®] 546 (sc-514066 AF546), Alexa Fluor[®] 594 (sc-514066 AF594) or Alexa Fluor[®] 647 (sc-514066 AF647), 200 μ g/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor[®] 680 (sc-514066 AF680) or Alexa Fluor[®] 790 (sc-514066 AF790), 200 μ g/ml, for Near-Infrared (NIR) WB, IF and FCM.

Blocking peptide available for competition studies, sc-514066 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% stabilizer protein).

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APPLICATIONS

CLIC5B (D-10) is recommended for detection of CLIC5B of human origin by Western Blotting (starting dilution 1:100, 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).

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.

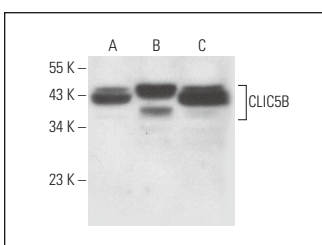
Molecular Weight of CLIC5B: 46 kDa.

Positive Controls: JEG-3 whole cell lysate: sc-364255, HT-29 whole cell lysate: sc-364232 or WiDr cell lysate: sc-24779.

RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgG κ BP-HRP: sc-516102 or m-IgG κ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker[™] Molecular Weight Standards: sc-2035, UltraCruz[®] Blocking Reagent: sc-516214 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 m-IgG κ BP-FITC: sc-516140 or m-IgG κ BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz[®] Mounting Medium: sc-24941 or UltraCruz[®] Hard-set Mounting Medium: sc-359850.

DATA



CLIC5B (D-10): sc-514066. Western blot analysis of CLIC5B expression in JEG-3 (A), HT-29 (B) and WiDr (C) whole cell lysates.

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 for detailed protocols and support products.