

CLIC1 Antibody

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP7589a

Product Information

Application IHC-P, WB, E **Primary Accession** 000299 Reactivity Human Host Rabbit Clonality Polyclonal Isotype Rabbit IgG **Clone Names** RB14720 Calculated MW 26923

Additional Information

Gene ID 1192

Other Names Chloride intracellular channel protein 1, Chloride channel ABP, Nuclear

chloride ion channel 27, NCC27, Regulatory nuclear chloride ion channel

protein, hRNCC, CLIC1, G6, NCC27

Target/SpecificityThis CLIC1 antibody is generated from rabbits immunized with a recombinant

human CLIC1 protein.

Dilution IHC-P~~1:100~500 WB~~1:1000 E~~Use at an assay dependent concentration.

Format Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide.

This antibody is prepared by Saturated Ammonium Sulfate (SAS) precipitation

followed by dialysis against PBS.

Storage Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store

at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions CLIC1 Antibody is for research use only and not for use in diagnostic or

therapeutic procedures.

Protein Information

Name CLIC1 {ECO:0000303|PubMed:16339885, ECO:0000312|HGNC:HGNC:2062}

Function In the soluble state, catalyzes glutaredoxin-like thiol disulfide exchange

reactions with reduced glutathione as electron donor. Reduces selenite and dehydroascorbate and may act as an antioxidant during oxidative stress response (PubMed:25581026, PubMed:37759794). Can insert into membranes and form voltage-dependent multi-ion conductive channels. Membrane

insertion seems to be redox- regulated and may occur only under oxidizing conditions. Involved in regulation of the cell cycle.

Cellular Location

Nucleus. Nucleus membrane; Single-pass membrane protein. Cytoplasm. Cell membrane; Single-pass membrane protein. Endoplasmic reticulum {ECO:0000250 | UniProtKB:Q6MG61}. Note=Mostly in the nucleus including in the nuclear membrane (PubMed:12681486, PubMed:9139710). Small amount in the cytoplasm and the plasma membrane (PubMed:9139710). Exists both as soluble cytoplasmic protein and as membrane protein with probably a single transmembrane domain (PubMed:11551966, PubMed:11940526, PubMed:12681486, PubMed:14613939, PubMed:9139710). Might not be present in the nucleus of cardiac cells (By similarity) {ECO:0000250 | UniProtKB:Q6MG61, ECO:0000269 | PubMed:11551966, ECO:0000269 | PubMed:11940526, ECO:0000269 | PubMed:12681486, ECO:0000269 | PubMed:14613939, ECO:0000269 | PubMed:9139710}

Tissue Location

Expression is prominent in heart, placenta, liver, kidney and pancreas.

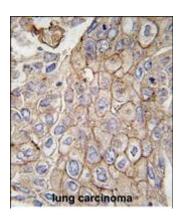
Background

Chloride channels are a diverse group of proteins that regulate fundamental cellular processes including stabilization of cell membrane potential, transepithelial transport, maintenance of intracellular pH, and regulation of cell volume. Chloride intracellular channel 1 is a member of the p64 family; the protein localizes principally to the cell nucleus and exhibits both nuclear and plasma membrane chloride ion channel activity.

References

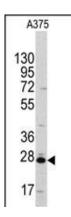
Singh,H., FEBS J. 274 (24), 6306-6316 (2007) Ulmasov,B., (er) BMC Cell Biol. 8, 8 (2007) Edwards,J.C., J. Membr. Biol. 213 (1), 39-46 (2006)

Images



Formalin-fixed and paraffin-embedded human lung carcinoma tissue reacted with CLIC1 antibody, which was peroxidase-conjugated to the secondary antibody, followed by DAB staining. This data demonstrates the use of this antibody for immunohistochemistry; clinical relevance has not been evaluated.

Western blot analysis of anti-CLIC1 Antibody (Cat.#AP7589a) in A375 cell line lysates (35ug/lane). CLIC1(arrow) was detected using the purified Pab.



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