10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

CLIC1 Antibody

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP7589a

Product Information

Application	IHC-P, WB, E
Primary Accession	O00299
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/Specificity	This 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.

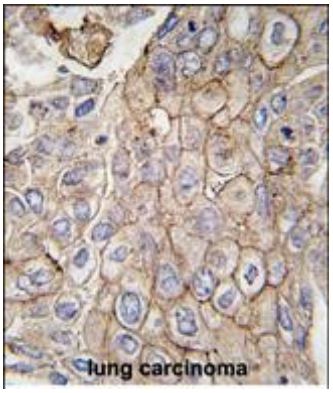
Background

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

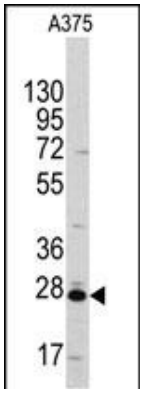
Singh,H., FEBS J. 274 (24), 6306-6316 (2007)
Ulmasov,B., (er) BMC Cell Biol. 8, 8 (2007)
Edwards,J.C., J. Membr. Biol. 213 (1), 39-46 (2006)

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.



Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.