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CLIC4 Antibody

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP7564a

Product Information

Application	WB, IHC-P, E
Primary Accession	Q9Y696
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB14721
Calculated MW	28772

Additional Information

Gene ID	25932
Other Names	Chloride intracellular channel protein 4, Intracellular chloride ion channel protein p64H1, CLIC4
Target/Specificity	This CLIC4 antibody is generated from rabbits immunized with recombinant human CLIC4 protein.
Dilution	WB~~1:1000 IHC-P~~1:100~500 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	CLIC4 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	CLIC4 {ECO:0000303|PubMed:12163372, ECO:0000312|HGNC:HGNC:13518}
Function	In the soluble state, catalyzes glutaredoxin-like thiol disulfide exchange reactions with reduced glutathione as electron donor (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 (By similarity) (PubMed:16176272). Has alternate cellular functions like a potential role in

	angiogenesis or in maintaining apical-basolateral membrane polarity during mitosis and cytokinesis. Could also promote endothelial cell proliferation and regulate endothelial morphogenesis (tubulogenesis). Promotes cell-surface expression of HRH3.
Cellular Location	Cytoplasm, cytoskeleton, microtubule organizing center, centrosome. Cytoplasmic vesicle membrane; Single-pass membrane protein. Nucleus. Cell membrane; Single-pass membrane protein. Mitochondrion {ECO:0000250|UniProtKB:Q9Z0W7}. Cell junction. Endoplasmic reticulum membrane {ECO:0000250|UniProtKB:Q9Z0W7}; Single-pass membrane protein {ECO:0000250|UniProtKB:Q9Z0W7}. Note=Colocalized with AKAP9 at the centrosome and midbody. Exists both as soluble cytoplasmic protein and as membrane protein with probably a single transmembrane domain Present in an intracellular vesicular compartment that likely represent trans-Golgi network vesicles. Might not be present in the nucleus of cardiac cells. {ECO:0000250|UniProtKB:Q9Z0W7, ECO:0000269|PubMed:14569596}
Tissue Location	Detected in epithelial cells from colon, esophagus and kidney (at protein level). Expression is prominent in heart, kidney, placenta and skeletal muscle.

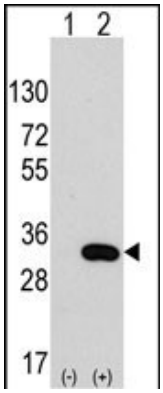
Background

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 4 (CLIC4) protein, encoded by the CLIC4 gene, is a member of the p64 family; the gene is expressed in many tissues and exhibits a intracellular vesicular pattern in Panc-1 cells (pancreatic cancer cells).

References

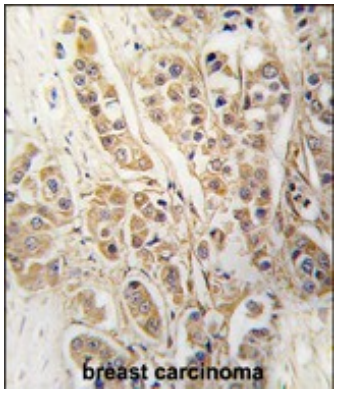
Singh,H.,FEBS J. 274 (24), 6306-6316 (2007)
Suh,K.S.,J. Cell. Sci. 120 (PT 15), 2631-2640 (2007)
Suh,K.S.,Clin. Cancer Res. 13 (1), 121-131 (2007)

Images



Western blot analysis of CLIC4 (arrow) using rabbit polyclonal CLIC4 Antibody (Cat.#AP7564a).293 cell lysates (2 ug/lane) either nontransfected (Lane 1) or transiently transfected with the CLIC4 gene (Lane 2) (Origene Technologies).

Formalin-fixed and paraffin-embedded human breast carcinoma tissue reacted with CLIC4 antibody (Cat.#AP7564a), 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.



Citations

- Association of chloride intracellular channel 4 and Indian hedgehog proteins with survival of patients with pancreatic ductal adenocarcinoma.

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