

### CLIC1 Antibody

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP7589a

#### Specification

# **CLIC1 Antibody - Product Information**

Application Primary Accession Reactivity Host Clonality Isotype Calculated MW WB, IHC-P,E <u>000299</u> Human Rabbit Polyclonal Rabbit IgG 26923

### **CLIC1 Antibody - 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** WB~~1:1000 IHC-P~~1:10~50 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.

## **CLIC1 Antibody - 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:<u>25581026</u>, PubMed:<u>37759794</u>). 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}

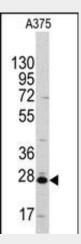
#### **Tissue Location**

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

### **CLIC1 Antibody - Protocols**

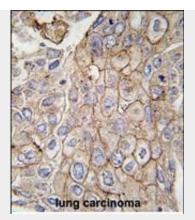
Provided below are standard protocols that you may find useful for product applications.

- <u>Western Blot</u>
- <u>Blocking Peptides</u>
- <u>Dot Blot</u>
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>
- CLIC1 Antibody Images



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





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.

## **CLIC1 Antibody - 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.

### **CLIC1 Antibody - 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)