

CLIC1 Antibody

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP7589a

Specification

CLIC1 Antibody - Product Information

Application WB, IHC-P,E
Primary Accession O00299
Reactivity Human
Host Rabbit
Clonality Polyclonal
Isotype Rabbit IgG
Calculated MW 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

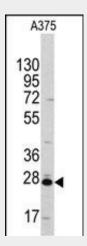
Expression is prominent in heart, placenta, liver, kidney and pancreas.

CLIC1 Antibody - Protocols

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

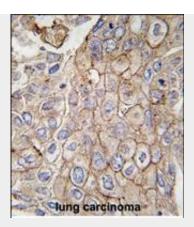
- Western Blot
- Blocking Peptides
- Dot Blot
- <u>Immunohistochemistry</u>
- Immunofluorescence
- Immunoprecipitation
- Flow Cvtometv
- Cell Culture

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)