

# CLIC4 Polyclonal Antibody

Catalog # AP63671

## **Product Information**

Application	WB, IHC-P
Primary Accession	<u>Q9Y696</u>
Reactivity	Human, Rat, Mouse
Host	Rabbit
Clonality	Polyclonal
Calculated MW	28772

#### **Additional Information**

Gene ID	25932
Other Names	CLIC4; Chloride intracellular channel protein 4; Intracellular chloride ion channel protein p64H1
Dilution	WB~~WB 1:1000-2000, IHC 1:100-200 IHC-P~~N/A
Format	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.09% (W/V) sodium azide.
Storage Conditions	-20°C

## **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: <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 (By similarity) (PubMed: <u>16176272</u> ). 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

Can insert into membranes and form poorly selective ion channels that may also transport chloride ions. Channel activity depends on the pH. Membrane insertion seems to be redox-regulated and may occur only under oxydizing conditions. Promotes cell- surface expression of HRH3. 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).

#### Images



Western blot analysis of 1) Mouse Brain Tissue, 2)Rat Brain Tissue, with CLIC4 Rabbit pAb diluted at 1:2,000.

Immunohistochemical analysis of paraffin-embedded Human Breast Carcinoma using CLIC4Rabbit pAb diluted at 1:200.

Immunohistochemical analysis of paraffin-embedded Rat Brain Tissue using CLIC4Rabbit pAb diluted at 1:200.

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