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

CLIC4 Antibody

Rabbit mAb
Catalog # AP93028

Product Information

Application	WB, IHC, IF, FC, ICC, IP, IHF
Primary Accession	Q9Y696
Reactivity	Rat, Human, Mouse
Clonality	Monoclonal
Other Names	Chloride intracellular channel 4; Clic4; CLIC4L; HUH1; MC3S5; mtCLIC; p64H1;
Isotype	Rabbit IgG
Host	Rabbit
Calculated MW	28772

Additional Information

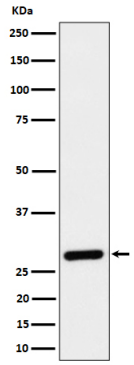
Dilution	WB 1:500~1:2000 IHC 1:50~1:200 ICC/IF 1:50~1:200 IP 1:50 FC 1:50
Purification	Affinity-chromatography
Immunogen	A synthesized peptide derived from human CLIC4
Description	Can insert into membranes and form poorly selective ion channels that may also transport chloride ions. Channel activity 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).
Storage Condition and Buffer	Rabbit IgG in phosphate buffered saline , pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol. Store at +4°C short term. Store at -20°C long term. Avoid freeze / thaw cycle.

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.

Images



Western blot analysis of CLIC4 expression in 293 cell lysate.