

KD-Validated Anti-Chloride intracellular channel 4 Rabbit Monoclonal Antibody
Rabbit monoclonal antibody
Catalog # AGI1203**Specification****KD-Validated Anti-Chloride intracellular channel 4 Rabbit Monoclonal Antibody - Product Information**

Application	WB, FC, ICC
Primary Accession	O9Y696
Reactivity	Rat, Human, Mouse
Clonality	Monoclonal
Isotype	Rabbit IgG
Calculated MW	Predicted, 29 kDa , observed, 29 kDa
Gene Name	CLIC4
Aliases	CLIC4; Chloride Intracellular Channel 4; P64H1 2; CLIC4L; H1; Intracellular Chloride Ion Channel Protein P64H1; Chloride Intracellular Channel Protein 4; DKFZP566G223; HuH1; Epididymis Secretory Sperm Binding Protein; Chloride Intracellular Channel 4 Like; MTCLIC; HUH1 A synthesized peptide derived from human CLIC4
Immunogen	

KD-Validated Anti-Chloride intracellular channel 4 Rabbit Monoclonal Antibody - Additional Information

Gene ID	25932
Other Names	
Chloride intracellular channel protein 4, Glutaredoxin-like oxidoreductase CLIC4, 1.8.-., Intracellular chloride ion channel protein p64H1, CLIC4 {ECO:0000303 PubMed:12163372, ECO:0000312 HGNC:HGNC:13518}	

KD-Validated Anti-Chloride intracellular channel 4 Rabbit Monoclonal Antibody - 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

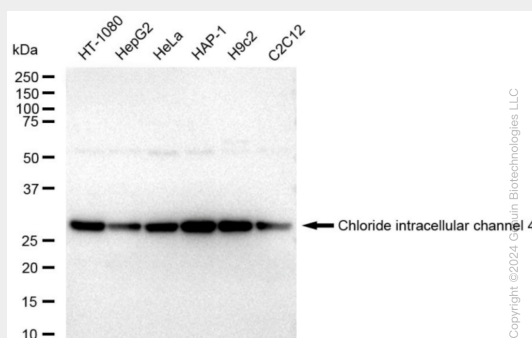
Detected in epithelial cells from colon, esophagus and kidney (at protein level). Expression is prominent in heart, kidney, placenta and skeletal muscle.

KD-Validated Anti-Chloride intracellular channel 4 Rabbit Monoclonal Antibody - Protocols

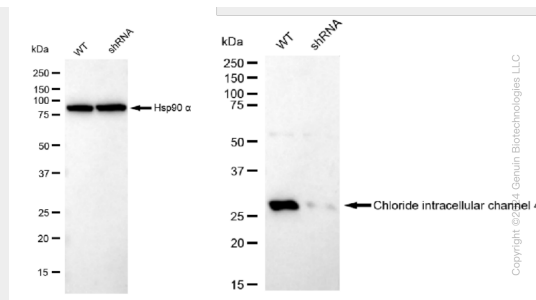
Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

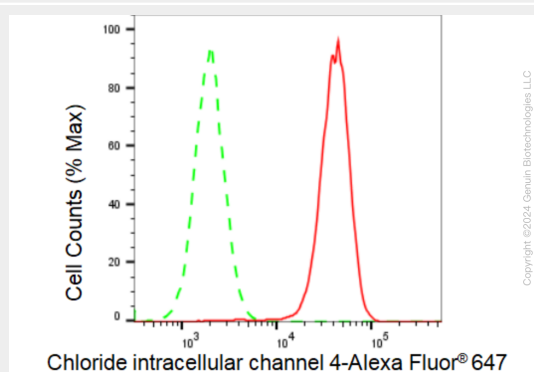
KD-Validated Anti-Chloride intracellular channel 4 Rabbit Monoclonal Antibody - Images



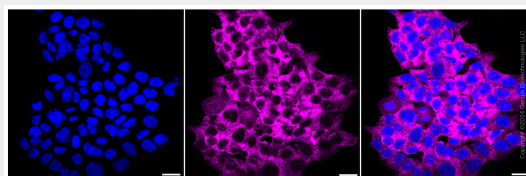
Western blotting analysis using anti-Chloride intracellular channel 4 antibody (Cat#61409). Total cell lysates (30 µg) from various cell lines were loaded and separated by SDS-PAGE. The blot was incubated with anti-Chloride intracellular channel 4 antibody (Cat#61409, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody (Cat#201, 1:20,000) respectively. Image was developed using FeQ™ ECL Substrate Kit (Cat#226).



Western blotting analysis using anti-Chloride intracellular channel 4 antibody (Cat#61409). Chloride intracellular channel 4 expression in wild type (WT) and Chloride intracellular channel 4 shRNA knockdown (KD) HeLa cells with 30 μ g of total cell lysates. β -Tubulin serves as a loading control. The blot was incubated with anti-Chloride intracellular channel 4 antibody (Cat#61409, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody (Cat#201, 1:20,000) respectively. Image was developed using FeQ™ ECL Substrate Kit (Cat#226).



Flow cytometric analysis of Chloride intracellular channel 4 expression in HAP-1 cells using Chloride intracellular channel 4 antibody (Cat#61409, 1:2,000). Green, isotype control; red, Chloride intracellular channel 4.



Immunocytochemical staining of HAP-1 cells with Chloride intracellular channel 4 antibody (Cat#61409, 1:1,000). Nuclei were stained blue with DAPI; Chloride intracellular channel 4 was stained magenta with Alexa Fluor® 647. Images were taken using Leica stellaris 5. Protein abundance based on laser Intensity and smart gain: High. Scale bar: 20 μ m.