

CLIC5 Antibody

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP7583a

Specification

CLIC5 Antibody - Product Information

Application Primary Accession Reactivity Host Clonality Isotype Calculated MW WB, IHC-P,E <u>O9NZA1</u> Human Rabbit Polyclonal Rabbit IgG 46503

CLIC5 Antibody - Additional Information

Gene ID 53405

Other Names Chloride intracellular channel protein 5, CLIC5

Target/Specificity This CLIC5 antibody is generated from rabbits immunized with human recombinant CLIC5 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 CLIC5 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

CLIC5 Antibody - Protein Information

Name CLIC5 {ECO:0000303|PubMed:10793131, ECO:0000312|HGNC:HGNC:13517}

Function In the soluble state, catalyzes glutaredoxin-like thiol disulfide exchange reactions with reduced glutathione as electron donor (By similarity). Can insert into membranes and form non-selective ion channels almost equally permeable to Na(+), K(+) and Cl(-) (PubMed: <u>15184393</u>, PubMed: <u>18028448</u>). Required for normal hearing (PubMed: <u>24781754</u>). It is necessary for the



formation of stereocilia in the inner ear and normal development of the organ of Corti (By similarity). May play a role in the regulation of transepithelial ion absorption and secretion. Is required for the development and/or maintenance of the proper glomerular endothelial cell and podocyte architecture (PubMed:<u>15184393</u>, PubMed:<u>18028448</u>, PubMed:<u>20335315</u>). Plays a role in formation of the lens suture in the eye, which is important for normal optical properties of the lens (By similarity).

Cellular Location

[Isoform 1]: Cytoplasm, cytoskeleton. Cytoplasm, cell cortex. Membrane; Single-pass membrane protein. Apical cell membrane; Single-pass membrane protein. Cytoplasm {ECO:0000250|UniProtKB:000299}. Mitochondrion {ECO:0000250|UniProtKB:Q9EPT8}. Cell projection, stereocilium. Note=Associates with the cortical actin cytoskeleton (PubMed:10793131, PubMed:15184393). Localizes to the apical region of cochlear hair cells, at the base of the actin-rich hair bundle (By similarity). Colocalizes with podocalyxin at the apical cell membrane in renal glomeruli (PubMed:20335315). May localize to the centrosome in lens epithelial cells (By similarity). Exists both as soluble cytoplasmic protein and as membrane protein with probably a single transmembrane domain (By similarity) {ECO:0000250|UniProtKB:000299, ECO:0000250|UniProtKB:Q8BXK9, ECO:0000250|UniProtKB:Q9EPT8, ECO:0000269|PubMed:10793131, ECO:0000269|PubMed:15184393, ECO:0000269|PubMed:20335315}

Tissue Location

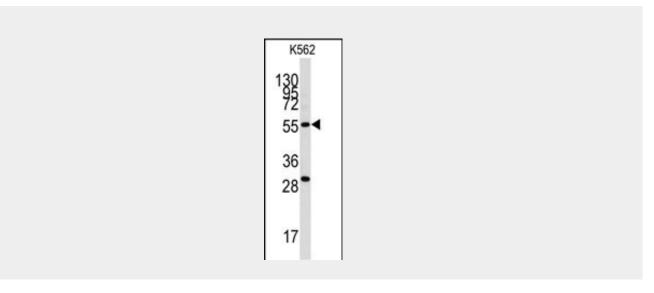
Widely expressed in both fetal and adult human tissues (PubMed:24781754). Isoform 1 is expressed in renal glomeruli endothelial cells and podocytes (at protein level)

CLIC5 Antibody - Protocols

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

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

CLIC5 Antibody - Images





Western blot analysis of anti-CLIC5 Antibody (Cat.#AP7583a) in K562 cell line lysates (35ug/lane). CLIC5(arrow) was detected using the purified Pab.



Formalin-fixed and paraffin-embedded human colon carcinoma tissue reacted with CLIC5 antibody (Cat.#AP7583a), 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.

CLIC5 Antibody - Background

Chloride intracellular channels are involved in chloride ion transport within various subcellular compartments. CLIC5 specifically associates with the cytoskeleton of placenta microvilli.

CLIC5 Antibody - References

Berryman, M., J. Biol. Chem. 279 (33), 34794-34801 (2004) Suzuki, T., Epilepsy Res. 50 (3), 265-275 (2002)