

# CLIC5 Antibody

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP7583a

## **Product Information**

Application WB, IHC-P,	E
Primary Accession <u>Q9NZA1</u>	
Reactivity Human	
Host Rabbit	
Clonality Polyclonal	
Isotype Rabbit IgG	
Clone Names RB14724	
Calculated MW 46503	

## **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~~1:100~500 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.

### **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)

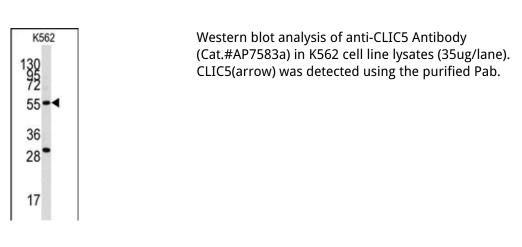
#### Background

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

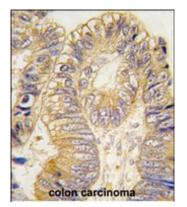
#### References

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

#### Images



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.



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