

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)

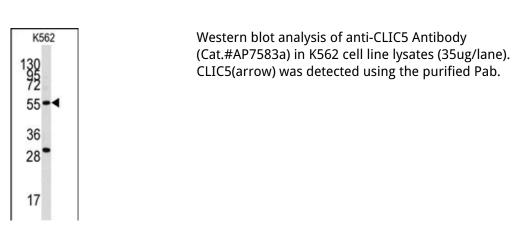
Background

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

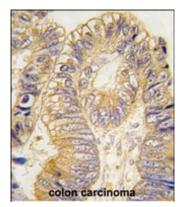
References

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.



Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.