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CLIC5 Antibody Blocking Peptide

Synthetic peptide
Catalog # BP7583a

Specification

CLIC5 Antibody Blocking Peptide - Product Information

Primary Accession Q9NZA1

CLIC5 Antibody Blocking Peptide - Additional Information

Gene ID 53405

Other Names
Chloride intracellular channel protein 5, CLIC5

Target/Specificity
The synthetic peptide sequence used to generate the antibody AP7583a was selected from the region of human CLIC5. A 10 to 100 fold molar excess to antibody is recommended. Precise conditions should be optimized for a particular assay.

Format
Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

Storage
Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

Precautions
This product is for research use only. Not for use in diagnostic or therapeutic procedures.

CLIC5 Antibody Blocking Peptide - 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:15184393, PubMed:18028448). Required for normal hearing (PubMed:24781754). 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:15184393, PubMed:18028448, PubMed:<a

href="http://www.uniprot.org/citations/20335315" target="_blank">20335315). 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:O00299}. 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:O00299, 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 Blocking Peptide - Protocols

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

- Blocking Peptides

CLIC5 Antibody Blocking Peptide - Images

CLIC5 Antibody Blocking Peptide - 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 Blocking Peptide - References

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