

CLIC5 Antibody Blocking Peptide Synthetic peptide Catalog # BP7583a

Specification

CLIC5 Antibody Blocking Peptide - Product Information

Primary Accession

<u>Q9NZA1</u>

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

Function

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). Can insert into membranes and form poorly selective ion channels that may also transport chloride ions. 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: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:000250|UniProtKB:000299}. Mitochondrion {ECO:0000250|UniProtKB:Q9EPT8}. 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 Blocking Peptide - Protocols

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

<u>Blocking Peptides</u>

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)