

MCOLN3 Antibody (C-term) Blocking peptide
Synthetic peptide
Catalog # BP13868b**Specification**

MCOLN3 Antibody (C-term) Blocking peptide - Product InformationPrimary Accession [Q8TDD5](#)**MCOLN3 Antibody (C-term) Blocking peptide - Additional Information**

Gene ID 55283

Other Names

Mucolipin-3, MCOLN3

Target/Specificity

The synthetic peptide sequence used to generate the antibody AP13868b was selected from the C-term region of MCOLN3. 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.

MCOLN3 Antibody (C-term) Blocking peptide - Protein Information

Name MCOLN3

Function

Nonselective ligand-gated cation channel probably playing a role in the regulation of membrane trafficking events. Acts as a Ca(2+)-permeable cation channel with inwardly rectifying activity (PubMed:18369318, PubMed:19497048, PubMed:19522758, PubMed:19885840, PubMed:29106414). Mediates release of Ca(2+) from endosomes to the cytoplasm, contributes to endosomal acidification and is involved in the regulation of membrane trafficking and fusion in the endosomal pathway (PubMed:21245134). Does not seem to act as mechanosensory transduction channel in inner ear sensory hair cells. Proposed to play a critical role at the cochlear stereocilia ankle-link region during hair-bundle growth (By similarity). Involved in the regulation of autophagy

(PubMed:19522758). Through association with GABARAPL2 may be involved in autophagosome formation possibly providing Ca(2+) for the fusion process (By similarity). Through a possible and probably tissue-specific heteromerization with MCOLN1 may be at least in part involved in many lysosome-dependent cellular events (PubMed:19885840). Possible heteromeric ion channel assemblies with TRPV5 show pharmacological similarity with TRPML3 (PubMed:23469151).

Cellular Location

Cell membrane; Multi-pass membrane protein. Early endosome membrane; Multi-pass membrane protein. Late endosome membrane; Multi-pass membrane protein. Lysosome membrane; Multi-pass membrane protein. Cytoplasmic vesicle, autophagosome membrane. Note=Recycles between the plasma membrane and intracellular compartments by a dynamin-dependent endocytic pathway (PubMed:19522758). Under normal conditions, only a very minor proportion is present at the cell membrane (PubMed:19522758). In the cochlea located at the base of stereocilia near the position of the ankle links (By similarity) {ECO:0000250|UniProtKB:Q8R4F0, ECO:0000269|PubMed:19522758}

MCOLN3 Antibody (C-term) Blocking peptide - Protocols

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

- [Blocking Peptides](#)

MCOLN3 Antibody (C-term) Blocking peptide - Images

MCOLN3 Antibody (C-term) Blocking peptide - Background

Mucolipins constitute a family of cation channel proteins with homologs in mouse, Drosophila, and C. elegans. Mutations in the human MCOLN1 gene (MIM 605248) cause mucopolidosis IV (MIM262650).

MCOLN3 Antibody (C-term) Blocking peptide - References

Kim, H.J., et al. J. Biol. Chem. 285(22):16513-16520(2010)Curcio-Morelli, C., et al. J. Cell. Physiol. 222(2):328-335(2010)Kim, H.J., et al. Traffic 10(8):1157-1167(2009)Martina, J.A., et al. Traffic 10(8):1143-1156(2009)Grimm, C., et al. J. Biol. Chem. 284(20):13823-13831(2009)