

SLC9A9 Blocking Peptide (C-term)
Synthetic peptide
Catalog # BP5412b**Specification**

SLC9A9 Blocking Peptide (C-term) - Product Information

Primary Accession [Q8IVB4](#)
Other Accession [Q8BZ00](#), [NP_775924.1](#)

SLC9A9 Blocking Peptide (C-term) - Additional Information

Gene ID 285195

Other Names

Sodium/hydrogen exchanger 9, Na(+)/H(+) exchanger 9, NHE-9, Solute carrier family 9 member 9, SLC9A9, NHE9

Target/Specificity

The synthetic peptide sequence is selected from aa 566-579 of HUMAN SLC9A9

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.

SLC9A9 Blocking Peptide (C-term) - Protein Information

Name SLC9A9 ([HGNC:20653](#))

Synonyms NHE9

Function

Endosomal Na(+), K(+)/H(+) antiporter. Mediates the electroneutral exchange of endosomal luminal H(+) for a cytosolic Na(+) or K(+) (Probable). By facilitating proton efflux, SLC9A9 counteracts the acidity generated by vacuolar (V)-ATPase, thereby limiting luminal acidification. Regulates organellar pH and consequently, e.g., endosome maturation and endocytic trafficking of plasma membrane receptors and neurotransmitters (PubMed:28130443, PubMed:15522866, PubMed:24065030). Promotes the recycling of transferrin receptors back to the cell surface to facilitate additional iron uptake in the brain (PubMed:28130443). Regulates synaptic transmission by regulating the luminal pH of

axonal endosomes (By similarity). Regulates phagosome luminal pH, thus affecting phagosome maturation, and consequently, microbicidal activity in macrophages (By similarity). Can also be active at the cell surface of specialized cells, e.g., in the inner ear hair bundles uses the high K(+) of the endolymph to regulate intracellular pH (By similarity).

Cellular Location

Late endosome membrane; Multi-pass membrane protein {ECO:0000250|UniProtKB:F7B113}. Early endosome membrane; Multi-pass membrane protein {ECO:0000250|UniProtKB:F7B113}. Recycling endosome membrane; Multi-pass membrane protein {ECO:0000250|UniProtKB:F7B113}. Cell membrane {ECO:0000250|UniProtKB:Q8BZ00}; Multi-pass membrane protein {ECO:0000250|UniProtKB:F7B113}. Cytoplasmic vesicle, phagosome membrane {ECO:0000250|UniProtKB:Q8BZ00}; Multi-pass membrane protein {ECO:0000250|UniProtKB:F7B113}. Note=Localized to the plasma membrane in inner ear hair cell bundle. {ECO:0000250|UniProtKB:Q8BZ00}

Tissue Location

Ubiquitously expressed in all tissues tested. Expressed at highest levels in heart and skeletal muscle, followed by placenta, kidney, and liver. Expressed in the brain, in the medulla and spinal cord.

SLC9A9 Blocking Peptide (C-term) - Protocols

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

- [Blocking Peptides](#)

SLC9A9 Blocking Peptide (C-term) - Images

SLC9A9 Blocking Peptide (C-term) - Background

This gene encodes a sodium hydrogen exchanger that is a member of the solute carrier 9 protein family. The encoded protein localizes to the late recycling endosomes and may play an important role in maintaining cation homeostasis. Defects in this gene are associated with attention-deficit/hyperactivity disorder.

SLC9A9 Blocking Peptide (C-term) - References

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