

SLC9A6 Antibody (C-term) Blocking Peptide

Synthetic peptide Catalog # BP13226b

Specification

SLC9A6 Antibody (C-term) Blocking Peptide - Product Information

Primary Accession

092581

SLC9A6 Antibody (C-term) Blocking Peptide - Additional Information

Gene ID 10479

Other Names

Sodium/hydrogen exchanger 6, Na(+)/H(+) exchanger 6, NHE-6, Solute carrier family 9 member 6, SLC9A6, KIAA0267, NHE6

Target/Specificity

The synthetic peptide sequence used to generate the antibody AP13226b was selected from the C-term region of SLC9A6. 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.

SLC9A6 Antibody (C-term) Blocking Peptide - Protein Information

Name SLC9A6 (HGNC:11079)

Synonyms KIAA0267, NHE6

Function

Endosomal Na(+), K(+)/H(+) antiporter (PubMed:15522866, PubMed:31676550, PubMed:32277048, PubMed:28635961). Mediates the electroneutral exchange of endosomal luminal H(+) for a cytosolic Na(+) or K(+). By facilitating proton efflux, SLC9A6 counteracts the acidity generated by vacuolar (V)-ATPase, thereby limiting luminal acidification. Responsible for alkalizing and maintaining the endosomal pH, and consequently in, e.g., endosome maturation and trafficking of recycling endosomal cargo (PubMed:15522866,



PubMed:31676550, PubMed:32277048, PubMed:28635961). Plays a critical role during neurodevelopment by regulating synaptic development and plasticity (By similarity). Implicated in the maintenance of cell polarity in a manner that is dependent on its ability to modulate intravesicular pH (PubMed:20130086). Regulates intracelular pH in some specialized cells, osteoclasts and stereocilia where this transporter localizes to the plasma membrane (By similarity).

Cellular Location

Endosome membrane; Multi-pass membrane protein. Recycling endosome membrane; Multi-pass membrane protein. Early endosome membrane; Multi-pass membrane protein. Late endosome membrane; Multi-pass membrane protein. Cell membrane; Multi-pass membrane protein. Note=Present predominantly in the recycling compartments including early and recycling endosomes, but undergoes plasma membrane localization during vesicular recycling, which is enhanced upon certain stimuli, such as hypoxia (PubMed:28635961, PubMed:11940519, PubMed:30296617). Has a major plasmalemmal distribution in a few specialized cells, such as in vestibular hair bundles and osteoblasts (By similarity) {ECO:0000250|UniProtKB:A1L3P4, ECO:0000269|PubMed:11940519, ECO:0000269|PubMed:30296617}

Tissue Location

Ubiquitous. High expression in brain, skeletal muscle, and heart, but is also detected at lower levels in most other tissues.

SLC9A6 Antibody (C-term) Blocking Peptide - Protocols

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

• Blocking Peptides

SLC9A6 Antibody (C-term) Blocking Peptide - Images

SLC9A6 Antibody (C-term) Blocking Peptide - Background

This gene encodes a sodium-hydrogen exchanger that isamember of the solute carrier family 9. The encoded proteinlocalizes to early and recycling endosomes and may be involved inregulating endosomal pH and volume. Defects in this gene areassociated with X-linked syndromic mental retardation, Christiansontype. Alternate splicing results in multiple transcript variants.

SLC9A6 Antibody (C-term) Blocking Peptide - References

Garbern, J.Y., et al. Brain 133 (PT 5), 1391-1402 (2010) :Ohgaki, R., et al. Mol. Biol. Cell 21(7):1293-1304(2010)Fukura, N., et al. J. Membr. Biol. 234(3):149-158(2010)Fichou, Y., et al. Eur. J. Hum. Genet. 17(11):1378-1380(2009)Roxrud, I., et al. Exp. Cell Res. 315(17):3014-3027(2009)