

Anti-NHE9 Antibody

Rabbit polyclonal antibody to NHE9 Catalog # AP59905

Specification

Anti-NHE9 Antibody - Product Information

Application WB
Primary Accession Q8IVB4
Other Accession Q8BZ00

Reactivity Human, Mouse, Rat, Monkey, Drosophila

Host Rabbit
Clonality Polyclonal
Calculated MW 72565

Anti-NHE9 Antibody - Additional Information

Gene ID 285195

Other Names

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

Target/Specificity

Recognizes endogenous levels of NHE9 protein.

Dilution

WB~~WB (1/500 - 1/1000), IP (1/10 - 1/100)

Format

Liquid in 0.42% Potassium phosphate, 0.87% Sodium chloride, pH 7.3, 30% glycerol, and 0.09% (W/V) sodium azide.

Storage

Store at -20 °C. Stable for 12 months from date of receipt

Anti-NHE9 Antibody - Protein Information

Name SLC9A9 (<u>HGNC:20653</u>)

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 neurotransporters (PubMed:28130443, PubMed:<a



 $href="http://www.uniprot.org/citations/15522866" target="_blank">15522866, PubMed:24065030). Promotes the recycling of transferrin receptors back to the cell surface to facilitate additional iron uptake in the brain (PubMed:<a href="http://www.uniprot.org/citations/28130443"$

target="_blank">28130443). Regulates synaptic transmission by regulating the luminal pH of axonal endosomes (By similarity). Regulates phagosome lumenal 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 intracelular 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

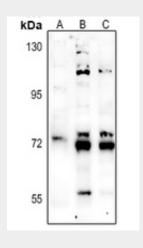
Ubiquitously expressed in all tissues tested. Expressed at highest levels in heart and skeletal muscle, followed by placenta, kidney, and liver. Expressed in the brain, in the medulla and spinal cord.

Anti-NHE9 Antibody - Protocols

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

- Western Blot
- Blocking Peptides
- Dot Blot
- <u>Immunohistochemistry</u>
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

Anti-NHE9 Antibody - Images





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Western blot analysis of NHE9 expression in rat heart (A), A549 (B), HepG2 (C) whole cell lysates. **Anti-NHE9 Antibody - Background**

KLH-conjugated synthetic peptide encompassing a sequence within the center region of human NHE9. The exact sequence is proprietary.