

NHE-9 Polyclonal Antibody

Catalog # AP71303

## Specification

# **NHE-9 Polyclonal Antibody - Product Information**

Application Primary Accession Reactivity Host Clonality WB <u>O8IVB4</u> Human, Mouse Rabbit Polyclonal

## **NHE-9 Polyclonal Antibody - Additional Information**

Gene ID 285195

**Other Names** SLC9A9; NHE9; Nbla00118; Sodium/hydrogen exchanger 9; Na(+)/H(+) exchanger 9; NHE-9; Solute carrier family 9 member 9

Dilution WB~~Western Blot: 1/500 - 1/2000. ELISA: 1/40000. Not yet tested in other applications.

**Format** Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.09% (W/V) sodium azide.

**Storage Conditions** -20°C

## **NHE-9 Polyclonal 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:<a

href="http://www.uniprot.org/citations/15522866" target="\_blank">15522866</a>, PubMed:<a href="http://www.uniprot.org/citations/24065030" target="\_blank">24065030</a>, PubMed:<a href="http://www.uniprot.org/citations/28130443" target="\_blank">28130443</a>). 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</a>). 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: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.

## **NHE-9 Polyclonal Antibody - Protocols**

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

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

## **NHE-9 Polyclonal Antibody - Images**











Page 3/4



# **NHE-9 Polyclonal Antibody - Background**

May act in electroneutral exchange of protons for Na(+) across membranes. Involved in the effusion of Golgi luminal H(+) in exchange for cytosolic cations. Involved in organelle ion homeostasis by contributing to the maintenance of the unique acidic pH values of the Golgi and post-Golgi compartments in the cell.