10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

NHE-9 Polyclonal Antibody

Catalog # AP71303

Product Information

Application	WB, E
Primary Accession	Q8IVB4
Reactivity	Human, Mouse
Host	Rabbit
Clonality	Polyclonal
Calculated MW	72565

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. E~~N/A
Format	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.09% (W/V) sodium azide.
Storage Conditions	-20℃

Protein Information

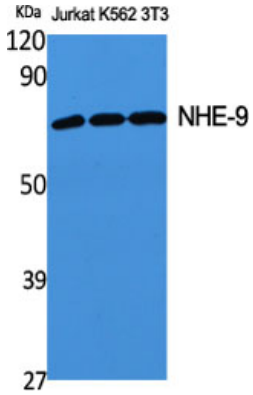
Name	SLC9A9 (HGNC:20653)
Synonyms	NHE9
Function	Endosomal Na(+), K(+)/H(+) antiporter. Mediates the electroneutral exchange of endosomal luminal H(+) for a cytosolic Na(+) or K(+) (Probable). By facilitating proton efflux, SLC9A9 counteracts the acidity generated by vacuolar (V)-ATPase, thereby limiting luminal acidification. Regulates organellar pH and consequently, e.g., endosome maturation and endocytic trafficking of plasma membrane receptors and neurotransporters (PubMed:15522866, PubMed:24065030, PubMed:28130443). 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 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 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.

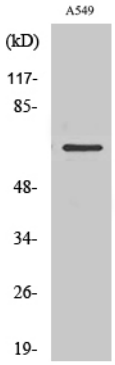
Background

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.

Images



Western Blot analysis of various cells using NHE-9 Polyclonal Antibody



Western Blot analysis of RAW264.7 cells using NHE-9 Polyclonal Antibody

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.