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Anti-NHE9 Antibody

Rabbit polyclonal antibody to NHE9
Catalog # AP59905

Product Information

Application	WB, IP
Primary Accession	Q8IVB4
Other Accession	Q8BZ00
Reactivity	Human, Mouse, Rat, Monkey, Drosophila
Host	Rabbit
Clonality	Polyclonal
Calculated MW	72565

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	KLH-conjugated synthetic peptide encompassing a sequence within the center region of human NHE9. The exact sequence is proprietary.
Dilution	WB~~WB (1/500 - 1/1000), IP (1/10 - 1/100) IP~~N/A
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

Protein Information

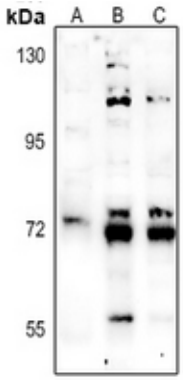
Name	SLC9A9 (HGNC:20653)
Synonyms	NHE9
Function	Endosomal Na(+), K(+)/H(+) antiporter. Mediates the electroneutral exchange of endosomal luminal H(+) for a cytosolic Na(+) or K(+) (Probable). By facilitating proton efflux, SLC9A9 counteracts the acidity generated by vacuolar (V)-ATPase, thereby limiting 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 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.

Background

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

Images



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