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Anti-NHE9 Antibody

Catalog # AP59905

Product Information

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

Additional Information

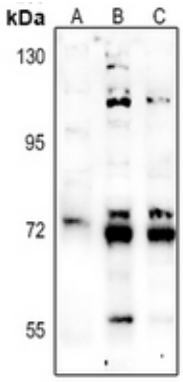
Gene ID	285195
Other Names	NHE9; Sodium/hydrogen exchanger 9; Na(+)/H(+) exchanger 9; NHE-9; Solute carrier family 9 member 9
Target/Specificity	KLH-conjugated synthetic peptide encompassing a sequence within the center region of human NHE9. The exact sequence is proprietary.
Dilution	WB~~WB (1/500 - 1/1000), IP (1/10 - 1/100)
Format	Liquid in 0.42% Potassium phosphate, 0.87% Sodium chloride, pH 7.3, 30% glycerol, and 0.01% 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 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.

Images



Western blot analysis of NHE9 expression in rat heart (A), A549 (B), HepG2 (C) whole cell lysates. (Predicted band size: 72 kD; Observed band size: 73 kD)

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