

NHE-9 Polyclonal Antibody
Catalog # AP71303**Specification**

NHE-9 Polyclonal Antibody - Product Information

Application	WB
Primary Accession	Q8IVB4
Reactivity	Human, Mouse
Host	Rabbit
Clonality	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 ([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 neurotransmitters (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 luminal 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

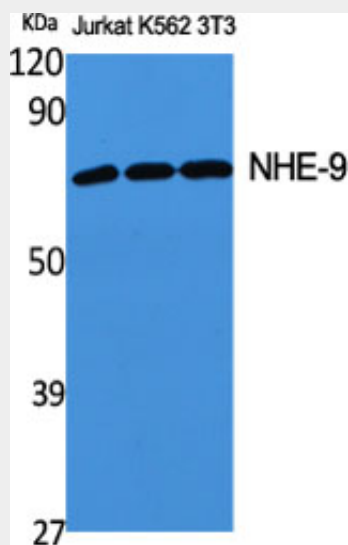
Ubiquitously expressed in all tissues tested. Expressed at highest levels in heart and skeletal muscle, followed by placenta, kidney, and liver. Expressed in the brain, in the medulla and spinal cord.

NHE-9 Polyclonal Antibody - Protocols

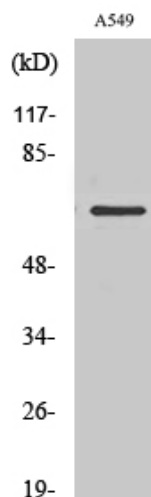
Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

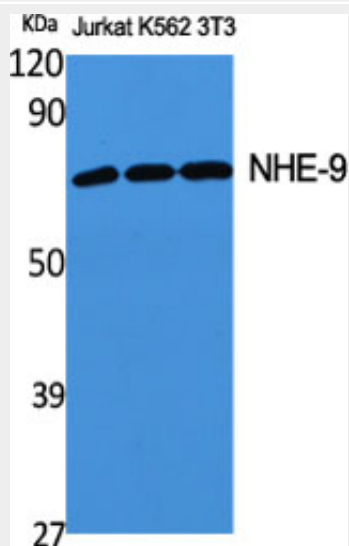
NHE-9 Polyclonal Antibody - Images



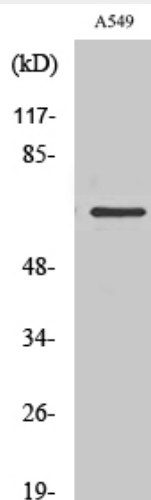
Western Blot analysis of various cells using NHE-9 Polyclonal Antibody



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



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



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

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.