

# NHE6 Antibody

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP51863

#### **Product Information**

Application WB Primary Accession Q92581

**Reactivity** Human, Mouse, Rat

HostRabbitClonalityPolyclonalCalculated MW77917

### **Additional Information**

**Gene ID** 10479

Other Names Sodium/hydrogen exchanger 6, Na(+)/H(+) exchanger 6, NHE-6, Solute carrier

family 9 member 6, SLC9A6, KIAA0267, NHE6

Dilution WB~~1:1000

Format 0.01M PBS, pH 7.2, 0.09% (W/V) Sodium azide, Glycerol 50%

**Storage** Store at -20 °C.Stable for 12 months from date of receipt

#### **Protein Information**

Name SLC9A6 ( HGNC:11079)

**Synonyms** KIAA0267, NHE6

**Function** Endosomal Na(+), K(+)/H(+) antiporter (PubMed: 15522866,

PubMed:<u>28635961</u>, PubMed:<u>31676550</u>, PubMed:<u>32277048</u>). Mediates the electroneutral exchange of endosomal luminal H(+) for a cytosolic Na(+) or K(+). By facilitating proton efflux, SLC9A6 counteracts the acidity generated by vacuolar (V)-ATPase, thereby limiting luminal acidification. Responsible for alkalizing and maintaining the endosomal pH, and consequently in, e.g., endosome maturation and trafficking of recycling endosomal cargo

(PubMed: 15522866, PubMed: 28635961, PubMed: 31676550,

PubMed:<u>32277048</u>). Plays a critical role during neurodevelopment by regulating synaptic development and plasticity (By similarity). Implicated in the maintenance of cell polarity in a manner that is dependent on its ability to modulate intravesicular pH (PubMed:<u>20130086</u>). Regulates intracelular pH in some specialized cells, osteoclasts and stereocilia where this transporter

localizes to the plasma membrane (By similarity).

**Cellular Location** Endosome membrane; Multi-pass membrane protein. Recycling endosome

membrane; Multi-pass membrane protein. Early endosome membrane; Multi-pass membrane protein. Late endosome membrane; Multi-pass membrane protein. Cell membrane; Multi-pass membrane protein.

Note=Present predominantly in the recycling compartments including early and recycling endosomes, but undergoes plasma membrane localization during vesicular recycling, which is enhanced upon certain stimuli, such as hypoxia (PubMed:11940519, PubMed:28635961, PubMed:30296617). Has a major plasmalemmal distribution in a few specialized cells, such as in vestibular hair bundles and osteoblasts (By similarity) {ECO:0000250 | UniProtKB:A1L3P4, ECO:0000269 | PubMed:11940519, ECO:0000269 | PubMed:28635961, ECO:0000269 | PubMed:30296617}

#### **Tissue Location**

Ubiquitous. High expression in brain, skeletal muscle, and heart, but is also detected at lower levels in most other tissues.

## **Background**

Electroneutral exchange of protons for Na(+) and K(+) across the early and recycling endosome membranes. Contributes to calcium homeostasis.

### References

Numata M., et al. J. Biol. Chem. 273:6951-6959(1998). Ota T., et al. Nat. Genet. 36:40-45(2004). Ross M.T., et al. Nature 434:325-337(2005). Nagase T., et al. DNA Res. 3:321-329(1996). Brett C.L., et al. Am. J. Physiol. 282:C1031-C1041(2002).

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