

**SLC9A9 Antibody (C-term)**  
**Affinity Purified Rabbit Polyclonal Antibody (Pab)**  
**Catalog # AP5412b****Specification**

---

**SLC9A9 Antibody (C-term) - Product Information**

Application	FC, IHC-P, WB,E
Primary Accession	<a href="#">Q8IVB4</a>
Other Accession	<a href="#">Q8BZ00</a> , <a href="#">NP_775924.1</a>
Reactivity	Human, Mouse
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Calculated MW	72565
Antigen Region	551-579

**SLC9A9 Antibody (C-term) - Additional Information****Gene ID** 285195**Other Names**

Sodium/hydrogen exchanger 9, Na(+)/H(+) exchanger 9, NHE-9, Solute carrier family 9 member 9, SLC9A9, NHE9

**Target/Specificity**

This SLC9A9 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 551-579 amino acids from the C-terminal region of human SLC9A9.

**Dilution**

FC~~1:10~50

IHC-P~~1:50~100

WB~~1:1000

E~~Use at an assay dependent concentration.

**Format**

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

**Storage**

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

**Precautions**

SLC9A9 Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

**SLC9A9 Antibody (C-term) - 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**

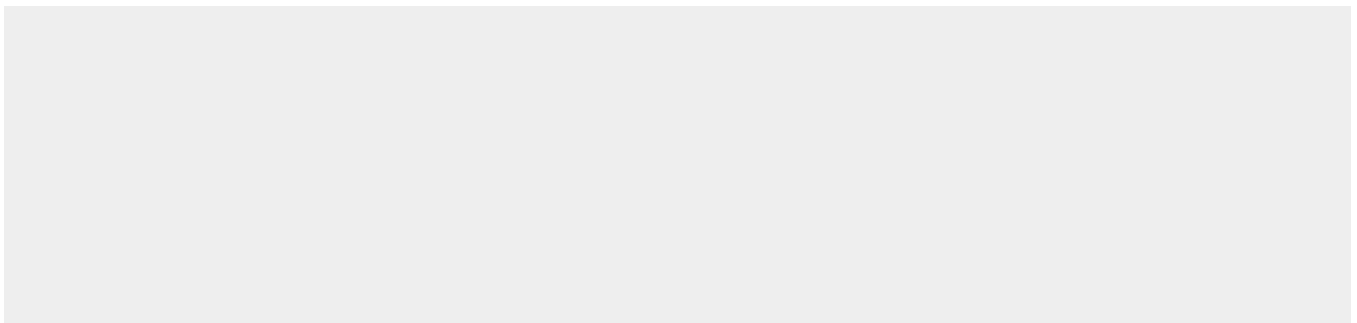
Ubiquitously expressed in all tissues tested. Expressed at highest levels in heart and skeletal muscle, followed by placenta, kidney, and liver. Expressed in the brain, in the medulla and spinal cord.

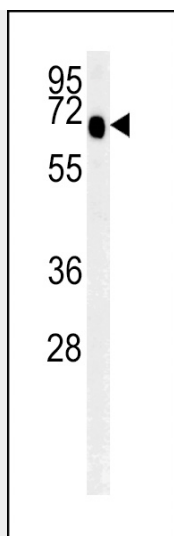
**SLC9A9 Antibody (C-term) - Protocols**

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

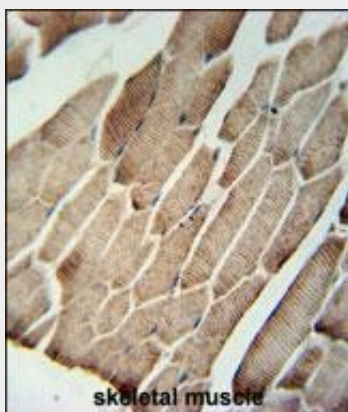
- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

**SLC9A9 Antibody (C-term) - Images**

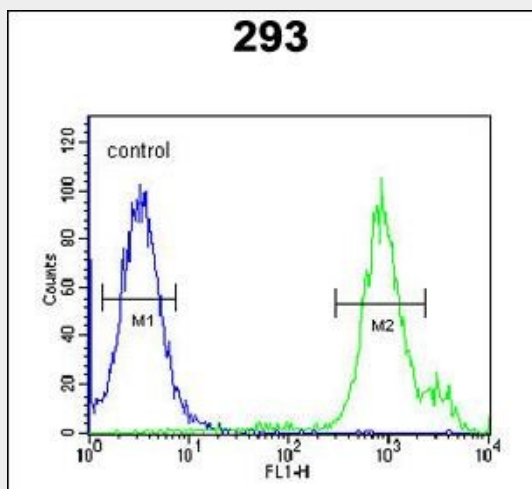




SLC9A9 Antibody (C-term)(Cat. #AP5412b) western blot analysis in mouse spleen tissue lysates (35ug/lane). This demonstrates the SLC9A9 antibody detected SLC9A9 protein (arrow).



SLC9A9 Antibody (C-term) (Cat. #AP5412b) immunohistochemistry analysis in formalin fixed and paraffin embedded human skeletal muscle followed by peroxidase conjugation of the secondary antibody and DAB staining. This data demonstrates the use of the SLC9A9 Antibody (C-term) for immunohistochemistry. Clinical relevance has not been evaluated.



SLC9A9 Antibody (C-term) (Cat. #AP5412b) flow cytometric analysis of 293 cells (right histogram) compared to a negative control cell (left histogram). FITC-conjugated goat-anti-rabbit secondary

antibodies were used for the analysis.

### **SLC9A9 Antibody (C-term) - Background**

This gene encodes a sodium hydrogen exchanger that is a member of the solute carrier 9 protein family. The encoded protein localizes to the late recycling endosomes and may play an important role in maintaining cation homeostasis. Defects in this gene are associated with attention-deficit/hyperactivity disorder.

### **SLC9A9 Antibody (C-term) - References**

Markunas, C.A., et al. Psychiatr. Genet. (2009) In press :  
Vink, J.M., et al. Am. J. Hum. Genet. 84(3):367-379(2009)  
Lasky-Su, J., et al. Am. J. Med. Genet. B Neuropsychiatr. Genet. 147B (8), 1355-1358 (2008) :  
Lasky-Su, J., et al. Am. J. Med. Genet. B Neuropsychiatr. Genet. 147B (8), 1345-1354 (2008) :  
Ng, D., et al. Int. J. Cancer 123(7):1610-1615(2008)  
Levy, D., et al. BMC Med. Genet. 8 SUPPL 1, S3 (2007) :  
Nakamura, N., et al. J. Biol. Chem. 280(2):1561-1572(2005)  
de Silva, M.G., et al. J. Med. Genet. 40(10):733-740(2003)