

Rabbit Anti-SLC9A9 antibody

SL4031R

Product Name:	SLC9A9
Chinese Name:	钠氢Channel protein9家族A9抗体
Alias:	Na(+)/H(+) exchanger 9; NHE 9; NHE9; Putative protein product of Nbla00118; Sodium/hydrogen exchanger 9; Sodium/proton exchanger NHE9; Solute carrier family 9 (sodium/hydrogen exchanger) isoform 9; Solute carrier family 9 (sodium/hydrogen exchanger) member 9; Solute carrier family 9 member 9; 5730527A11Rik; 9930105B05; AI854429; FLJ35613; SL9A9 HUMAN.
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human, Mouse, Rat, Chicken, Dog, Pig, Cow, Horse, Rabbit,
Applications:	ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800IF=1:100-500 (Paraffin sections need antigen repair) not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Molecular weight:	72kDa
Cellular localization:	cytoplasmicThe cell membrane
Form:	Lyophilized or Liquid
Concentration:	lmg/ml
immunogen:	KLH conjugated synthetic peptide derived from human SLC9A9:101-220/645
Lsotype:	IgG
Purification:	affinity purified by Protein A
Storage Buffer:	0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.
Storage:	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year when kept at -20 °C. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.
PubMed:	<u>PubMed</u>
Product Detail:	Slc9a9 (Sodium/hydrogen exchanger 9) or NHE9 may act in electroneutral exchange of protons for Na(+) across membranes. Four isoforms of the Na+/H+ exchanger (NHE6-NHE9) are distributed to intracellular compartments in human cells. They are localized

to Golgi and post-Golgi endocytic compartments as follows: mid- to trans-Golgi, NHE8; trans-Golgi network, NHE7; early recycling endosomes, NHE6; and late recycling endosomes, NHE9. The intracellular localization of the NHEs is established by the balance of transport in and out of the post-Golgi compartments as the dynamic membrane trafficking. Their in vivo function is to regulate the pH and monovalent cation concentration in these organelles.

Function:

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.

Subcellular Location:

Late endosome membrane; Multi-pass membrane protein.

Tissue Specificity:

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.

DISEASE:

Note=A chromosomal aberration involving SLC9A9 has been found in a family with early-onset behavioral/developmental disorder with features of attention deficit-hyperactivity disorder and intellectual disability. Inversion inv(3)(p14:q21). The inversion disrupts DOCK3 and SLC9A9.

Defects in SLC9A9 are a cause of susceptibility to autism type 16 (AUTS16) [MIM:613410]. Autism is a complex multifactorial, pervasive developmental disorder characterized by impairments in reciprocal social interaction and communication, restricted and stereotyped patterns of interests and activities, and the presence of developmental abnormalities by 3 years of age. Most individuals with autism also manifest moderate mental retardation. AUTS16 can be associated with epilepsy.

Similarity:

Belongs to the monovalent cation:proton antiporter 1 (CPA1) transporter (TC 2.A.36) family.

SWISS:

Q8IVB4

Gene ID:

285195

Database links:

Entrez Gene: 285195Human

Entrez Gene: 331004Mouse

Entrez Gene: 363115Rat

Omim: 608396Human

SwissProt: Q8IVB4Human

SwissProt: Q8BZ00Mouse

Unigene: 302257Human

Unigene: 326125 Mouse

Important Note:

This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.