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SLC9A6 Antibody (C-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP13226b

Product Information

Application	WB, IHC-P, E
Primary Accession	Q92581
Other Accession	NP_006350.1
Reactivity	Human, Rat, Mouse
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB33044
Calculated MW	77917
Antigen Region	501-530

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
Target/Specificity	This SLC9A6 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 501-530 amino acids from the C-terminal region of human SLC9A6.
Dilution	WB~~1:1000 IHC-P~~1:100~500 E~~Use at an assay dependent concentration.
Format	Purified polyclonal antibody supplied in PBS with 0.05% (V/V) Proclin 300. This antibody is prepared by Saturated Ammonium Sulfate (SAS) precipitation followed by dialysis against PBS.
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	SLC9A6 Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	SLC9A6 (HGNC:11079)
Synonyms	KIAA0267, NHE6
Function	Endosomal Na(+), K(+)/H(+) antiporter (PubMed: 15522866,

	PubMed:28635961, PubMed:31676550, PubMed:32277048). 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:32277048). 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:20130086). 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

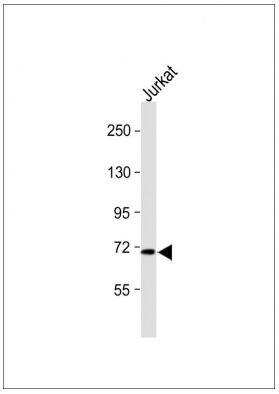
This gene encodes a sodium-hydrogen exchanger that is amember of the solute carrier family 9. The encoded protein localizes to early and recycling endosomes and may be involved in regulating endosomal pH and volume. Defects in this gene are associated with X-linked syndromic mental retardation, Christianson type. Alternate splicing results in multiple transcript variants.

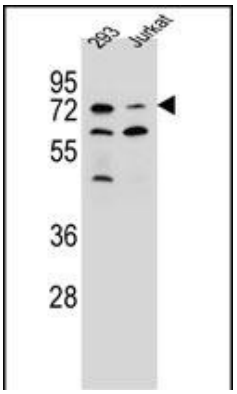
References

Garbern, J.Y., et al. Brain 133 (PT 5), 1391-1402 (2010) :
Ohgaki, R., et al. Mol. Biol. Cell 21(7):1293-1304(2010)
Fukura, N., et al. J. Membr. Biol. 234(3):149-158(2010)
Fichou, Y., et al. Eur. J. Hum. Genet. 17(11):1378-1380(2009)
Roxrud, I., et al. Exp. Cell Res. 315(17):3014-3027(2009)

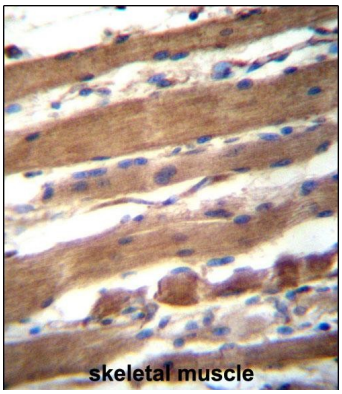
Images

All lanes : Anti-SLC9A6 Antibody (C-term) at 1:500 dilution
Lane 1: Jurkat whole cell lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated (ASP1615) at 1/15000 dilution. Observed band size : 70kDa Blocking/Dilution buffer: 5% NFDM/TBST.





SLC9A6 Antibody (C-term) (Cat. #AP13226b) western blot analysis in 293,Jurkat cell line lysates (35ug/lane).This demonstrates the SLC9A6 antibody detected the SLC9A6 protein (arrow).



SLC9A6 Antibody (C-term) (Cat. #AP13226b)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 SLC9A6 Antibody (C-term) for immunohistochemistry. Clinical relevance has not been evaluated.