

Rabbit anti-Human SLC8A3 Polyclonal Antibody | anti-SLC8A3 antibody

SLC8A3 Antibody (C-term)

CATALOG # AAA286089	HOST Rabbit	REACTIVITY Human	APPLICATIONS Immunohistochemistry, ELISA, Western Blot
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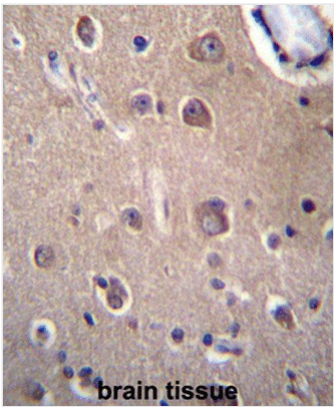
PRODUCT SYNONYMS

SLC8A3; Polyclonal Antibody; SLC8A3 Antibody (C-term); Sodium/calcium exchanger 3; Na(+)/Ca(2+)-exchange protein 3; Solute carrier family 8 member 3; NCX3; anti-SLC8A3 antibody

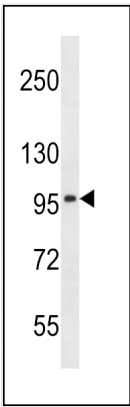
PRODUCT SPECIFICATIONS

Host	Rabbit
Reactivity	Human
Clonality	Polyclonal
Isotype	Rabbit IgG
Specificity	This SLC8A3 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 585-614 amino acids from the C-terminal region of human SLC8A3.
Purity/Purification	Peptide Affinity Purified Rabbit Polyclonal Antibody (Pab)
Form/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.
Sequence Positions	585-614
Sequence Length	298
Applicable Applications for anti-SLC8A3 antibody	IHC (Immunohistochemistry), ELISA, WB (Western Blot)
Function	Mediates the electrogenic exchange of Ca(2+) against Na(+) ions across the cell membrane, and thereby contributes to the regulation of cytoplasmic Ca(2+) levels and Ca(2+)-dependent cellular processes. Contributes to cellular Ca(2+) homeostasis in excitable cells, both in muscle and in brain. In a first phase, voltage-gated channels mediate the rapid increase of cytoplasmic Ca(2+) levels due to release of Ca(2+) stores from the endoplasmic reticulum. SLC8A3 mediates the export of Ca(2+) from the cell during the next phase, so that cytoplasmic Ca(2+) levels rapidly return to baseline. Contributes to Ca(2+) transport during excitation-contraction coupling in muscle. In neurons, contributes to the rapid decrease of cytoplasmic Ca(2+) levels back to baseline after neuronal activation, and thereby contributes to modulate synaptic plasticity, learning and memory (By similarity). Required for normal oligodendrocyte differentiation and for normal myelination (PubMed:). Mediates Ca(2+) efflux from mitochondria and contributes to mitochondrial Ca(2+) ion homeostasis (By similarity).
Cellular Location	Cell membrane; Multi-pass membrane protein. Perikaryon {ECO:0000250 UniProtKB:P70549}. Cell projection, dendrite {ECO:0000250 UniProtKB:P70549}. Cell projection, dendritic spine {ECO:0000250 UniProtKB:P70549}. Cell membrane, sarcolemma {ECO:0000250 UniProtKB:S4R2P9}. Cytoplasm, sarcoplasm {ECO:0000250 UniProtKB:S4R2P9}. Cell junction {ECO:0000250 UniProtKB:S4R2P9}. Mitochondrion outer membrane {ECO:0000250 UniProtKB:S4R2P9}; Multi-pass membrane protein ECO:0000250 UniProtKB:S4R2P9}. Cytoplasm, perinuclear region. Endoplasmic reticulum membrane; Multi-pass membrane protein {ECO:0000250 UniProtKB:S4R2P9}. Note=Detected at neuromuscular junctions. {ECO:0000250 UniProtKB:S4R2P9}
Tissue Location	Isoform 2 is expressed in brain and skeletal muscle. Isoform 3 is expressed in excitable cells of brain, retina and skeletal muscle. Isoform 4 is expressed in skeletal muscle
Preparation and Storage	Maintain refrigerated at 2-8 degree C for up to 2 weeks. For long term storage store at -20 degree C in small aliquots to prevent freeze-thaw cycles.

IMAGES



IHC (Immunohiostchemistry)
SLC8A3 Antibdy (C-term) immunohistochemistry analysis in formalin fixed and paraffin embedded human brain tissue followed by peroxidase conjugation of the secondary antibody and DAB staining.This data demonstrates the use of SLC8A3 Antibdy (C-term) for immunohistochemistry. Clinical relevance has not been evaluated.



WB (Western Blot)
SLC8A3 Antibody (C-term) western blot analysis in NCI-H460 cell line lysates (35ug/lane).This demonstrates the SLC8A3 antibody detected the SLC8A3 protein (arrow).

ADDITIONAL INFORMATION

Related Product Information for anti-SLC8A3 antibody	This gene encodes a member of the sodium/calcium exchanger integral membrane protein family. Three mammalian isoforms in family 8 have been identified. Na ⁺ /Ca ²⁺ exchange proteins are involved in maintaining Ca ²⁺ homeostasis in a wide variety of cell types. The protein is regulated by intracellular calcium ions and is found in both the plasma membrane and intracellular organellar membranes, where exchange of Na ⁺ for Ca ²⁺ occurs in an electrogenic manner. Alternative splicing has been observed for this gene and multiple variants have been described.
Product Categories/Family for anti-SLC8A3 antibody	Signal Transduction
References	Rose, J.E., et al. Mol. Med. 16 (7-8), 247-253 (2010) : Pulina, M.V., et al. J. Biol. Chem. 281(28):19645-19654(2006) Gomez-Villafuertes, R., et al. J. Neurosci. 25(47):10822-10830(2005) Lindgren, R.M., et al. Gene 348, 143-155 (2005) : Gabellini, N. Mol. Neurobiol. 30(1):91-116(2004)

NCBI AND UNIPROT INFORMATION

NCBI GI #	194354001
NCBI GeneID	6547
NCBI Accession #	NP_001123889.1; NP_150287.1; NP_489479.1; NP_891977.1; NP_891981.1; NP_892114.1
NCBI GenBank Nucleotide #	NM_001130417.2
UniProt Accession #	P57103; Q5K3P6; Q5K3P7; Q8IUE9; Q8IUF0; Q8NFI7; Q96QG1; Q96QG2
NCBI Official Full Name	sodium/calcium exchanger 3 isoform G
NCBI Official Synonym Full Names	solute carrier family 8 (sodium/calcium exchanger), member 3
NCBI Official Symbol	SLC8A3
NCBI Official Synonym Symbols	NCX3
NCBI Protein Information	sodium/calcium exchanger 3
UniProt Protein Name	Sodium/calcium exchanger 3
UniProt Gene Name	SLC8A3

UniProt Synonym Gene Names	NCX3
UniProt Entry Name	NAC3_HUMAN

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

AAA Biotech | Tel: +1 (619) 604-9440 | Fax: +1 (619) 604-9441 | contact@aaabiotech.com
Online datasheet: <https://www.aaabiotech.com/polyclonal/slc8a3-antibody-immunohistochemistry-western-blot-elisa/286089>