

ATP13A2 Antibody (C-term) Blocking Peptide

Synthetic peptide Catalog # BP16693b

Specification

ATP13A2 Antibody (C-term) Blocking Peptide - Product Information

Primary Accession

09N011

ATP13A2 Antibody (C-term) Blocking Peptide - Additional Information

Gene ID 23400

Other Names

Probable cation-transporting ATPase 13A2, 363-, ATP13A2, PARK9

Format

Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

Precautions

This product is for research use only. Not for use in diagnostic or therapeutic procedures.

ATP13A2 Antibody (C-term) Blocking Peptide - Protein Information

Name ATP13A2 (<u>HGNC:30213</u>)

Function

ATPase which acts as a lysosomal polyamine exporter with high affinity for spermine (PubMed:31996848). Also stimulates cellular uptake of polyamines and protects against polyamine toxicity (PubMed:31996848). Plays a role in intracellular cation homeostasis and the maintenance of neuronal integrity (PubMed:22186024). Contributes to cellular zinc homeostasis (PubMed:24603074). Confers cellular protection against Mn(2+) and Zn(2+) toxicity and mitochondrial stress (PubMed:26134396" target="_blank">26134396). Required for proper lysosomal and mitochondrial maintenance (PubMed:22296644, PubMed:28137957). Regulates the autophagy-lysosome pathway through the control of SYT11 expression at both transcriptional and post-translational levels (PubMed:27278822/a>). Facilitates

recruitment of deacetylase HDAC6 to lysosomes to deacetylate CTTN, leading to actin polymerization, promotion of autophagosome-lysosome fusion and completion of autophagy (PubMed:30538141).



Promotes secretion of exosomes as well as secretion of SCNA via exosomes (PubMed:25392495, PubMed:24603074). Plays a role in lipid homeostasis (PubMed:31132336).

Cellular Location

Lysosome membrane; Multi-pass membrane protein. Late endosome membrane; Multi-pass membrane protein. Endosome, multivesicular body membrane; Multi-pass membrane protein. Cytoplasmic vesicle, autophagosome membrane; Multi-pass membrane protein

Tissue Location

Expressed in brain; protein levels are markedly increased in brain from subjects with Parkinson disease and subjects with dementia with Lewy bodies. Detected in pyramidal neurons located throughout the cingulate cortex (at protein level). In the substantia nigra, it is found in neuromelanin-positive dopaminergic neurons (at protein level).

ATP13A2 Antibody (C-term) Blocking Peptide - Protocols

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

• Blocking Peptides

ATP13A2 Antibody (C-term) Blocking Peptide - Images

ATP13A2 Antibody (C-term) Blocking Peptide - Background

This gene encodes a member of the P5 subfamily of ATPaseswhich transports inorganic cations as well as other substrates. Mutations in this gene are associated with Kufor-Rakeb syndrome (KRS), also referred to as Parkinson disease 9. Multiple transcript variants encoding different isoforms have been found for this gene.

ATP13A2 Antibody (C-term) Blocking Peptide - References

Dos Santos, A.V., et al. Neurosci. Lett. 485(2):121-124(2010)Reetz, K., et al. Neurobiol. Dis. 39(3):402-408(2010)Schneider, S.A., et al. Mov. Disord. 25(8):979-984(2010)Okada, Y., et al. Hum. Mol. Genet. 19(11):2303-2312(2010)Fei, Q.Z., et al. Neurosci. Lett. 475(2):61-63(2010)