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ATP13A2 Antibody (C-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP16693B

Specification

ATP13A2 Antibody (C-term) - Product Information

Application	**WB,E**
Primary Accession	Q9NQ11
Other Accession	NP_071372.1, NP_001135446.1
Reactivity	**Human**
Host	**Rabbit**
Clonality	**Polyclonal**
Isotype	**Rabbit IgG**
Calculated MW	**128794**
Antigen Region	**1133-1161**

ATP13A2 Antibody (C-term) - Additional Information

Gene ID 23400

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

Target/Specificity
This ATP13A2 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 1133-1161 amino acids from the C-terminal region of human ATP13A2.

Dilution
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
ATP13A2 Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

ATP13A2 Antibody (C-term) - Protein Information

Name ATP13A2 (HGNC:30213)

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). 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). 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:24603074, PubMed:25392495). 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

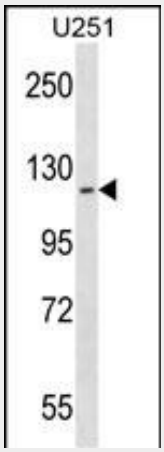
Tissue Location
Expressed in brain; protein levels are markedly increased in brain from subjects with Parkinson disease and subjects with dementia with Lewy bodies. Detected in pyramidal neurons located throughout the cingulate cortex (at protein level). In the substantia nigra, it is found in neuromelanin-positive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

ATP13A2 Antibody (C-term) - Protocols

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

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

ATP13A2 Antibody (C-term) - Images



ATP13A2 Antibody (C-term) (Cat. #AP16693b) western blot analysis in U251 cell line lysates

(35ug/lane).This demonstrates the ATP13A2 antibody detected the ATP13A2 protein (arrow).

ATP13A2 Antibody (C-term) - Background

This gene encodes a member of the P5 subfamily of ATPases which 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) - 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)
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