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ATP8A2 Antibody (N-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP10934a

Product Information

Application	WB, FC, E
Primary Accession	Q9NTI2
Other Accession	NP_057613.4
Reactivity	Human
Predicted	Mouse, Rat, Bovine, Canine, Rabbit
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB30118
Calculated MW	133599
Antigen Region	293-322

Additional Information

Gene ID	51761
Other Names	Phospholipid-transporting ATPase IB, ATPase class I type 8A member 2, ML-1, P4-ATPase flippase complex alpha subunit ATP8A2, ATP8A2, ATPIB
Target/Specificity	This ATP8A2 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 293-322 amino acids from the N-terminal region of human ATP8A2.
Dilution	WB~~1:1000 FC~~1:10~50 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	ATP8A2 Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

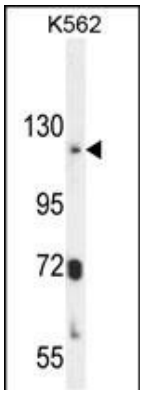
Name	ATP8A2 (HGNC:13533)
Synonyms	ATPIB

Function	Catalytic component of a P4-ATPase flippase complex which catalyzes the hydrolysis of ATP coupled to the transport of aminophospholipids from the outer to the inner leaflet of various membranes and ensures the maintenance of asymmetric distribution of phospholipids (By similarity). Able to translocate phosphatidylserine, but not phosphatidylcholine (PubMed:34403372). Phospholipid translocation also seems to be implicated in vesicle formation and in uptake of lipid signaling molecules (By similarity). Reconstituted to liposomes, the ATP8A2:TMEM30A flippase complex predominantly transports phosphatidylserine (PS) and to a lesser extent phosphatidylethanolamine (PE) (By similarity). Phospholipid translocation is not associated with a countertransport of an inorganic ion or other charged substrate from the cytoplasmic side toward the exoplasm in connection with the phosphorylation from ATP (By similarity). ATP8A2:TMEM30A may be involved in regulation of neurite outgrowth (By similarity). Proposed to function in the generation and maintenance of phospholipid asymmetry in photoreceptor disk membranes and neuronal axon membranes (By similarity). May be involved in vesicle trafficking in neuronal cells (By similarity). Required for normal visual and auditory function; involved in photoreceptor and inner ear spiral ganglion cell survival (By similarity).
Cellular Location	Membrane; Multi- pass membrane protein. Golgi apparatus membrane. Endosome membrane {ECO:0000250|UniProtKB:P98200}. Cell membrane. Photoreceptor outer segment membrane {ECO:0000250|UniProtKB:P98200}. Photoreceptor inner segment membrane {ECO:0000250|UniProtKB:C7EXK4}. Note=Localizes to the Golgi and endosomes in photoreceptor cells (By similarity). Localizes to disk membranes of rod photoreceptor outer segments (ROS) (By similarity) {ECO:0000250|UniProtKB:C7EXK4, ECO:0000250|UniProtKB:P98200}
Tissue Location	Strongly expressed in the brain, cerebellum, retina and testis.

References

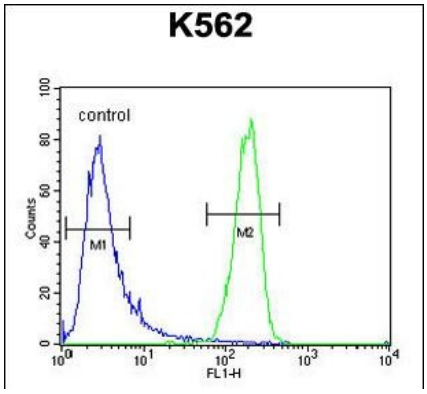
Rose, J.E., et al. Mol. Med. 16 (7-8), 247-253 (2010) :
Coleman, J.A., et al. J. Biol. Chem. 284(47):32670-32679(2009)
Dunham, A., et al. Nature 428(6982):522-528(2004)
Halleck, M.S., et al. Physiol. Genomics 1(3):139-150(1999)
Sun, X.L., et al. Gene Expr. 8(2):129-139(1999)

Images



ATP8A2 Antibody (N-term) (Cat. #AP10934a) western blot analysis in K562 cell line lysates (35ug/lane).This demonstrates the ATP8A2 antibody detected the ATP8A2 protein (arrow).

ATP8A2 Antibody (N-term) (Cat. #AP10934a) flow cytometric analysis of K562 cells (right histogram) compared to a negative control cell (left



histogram).FITC-conjugated goat-anti-rabbit secondary antibodies were used for the analysis.