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VPS4B Antibody (C-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP13813b

Product Information

Application	WB, E
Primary Accession	O75351
Other Accession	NP_004860.2
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB32061
Calculated MW	49302
Antigen Region	304-332

Additional Information

Gene ID	9525
Other Names	Vacuolar protein sorting-associated protein 4B, Cell migration-inducing gene 1 protein, Suppressor of K(+) transport growth defect 1, Protein SKD1, VPS4B, SKD1, VPS42
Target/Specificity	This VPS4B antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 304-332 amino acids from the C-terminal region of human VPS4B.
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	VPS4B Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	VPS4B (HGNC:10895)
Synonyms	SKD1, VPS42

Function	Involved in late steps of the endosomal multivesicular bodies (MVB) pathway. Recognizes membrane-associated ESCRT-III assemblies and catalyzes their ATP-dependent disassembly, possibly in combination with membrane fission (PubMed:18687924). Redistributes the ESCRT-III components to the cytoplasm for further rounds of MVB sorting. MVBs contain intraluminal vesicles (ILVs) that are generated by invagination and scission from the limiting membrane of the endosome and mostly are delivered to lysosomes enabling degradation of membrane proteins, such as stimulated growth factor receptors, lysosomal enzymes and lipids. VPS4A/B are required for the exosomal release of SDCBP, CD63 and syndecan (PubMed:22660413).
Cellular Location	Late endosome membrane {ECO:0000250|UniProtKB:P46467}; Peripheral membrane protein. Note=Membrane-associated in the prevacuolar endosomal compartment. Localized in HIV-1 particles purified from acutely infected cells.
Tissue Location	Ubiquitously expressed.

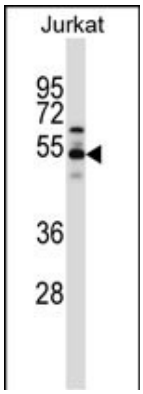
Background

The protein encoded by this gene is a member of the AAA protein family (ATPases associated with diverse cellular activities), and is the homolog of the yeast Vps4 protein. In humans, two paralogs of the yeast protein have been identified. The former share a high degree of aa sequence similarity with each other, and also with yeast Vps4 and mouse Skd1 proteins. Mouse Skd1 (suppressor of K+ transport defect 1) has been shown to be a yeast Vps4 ortholog. Functional studies indicate that both human paralogs associate with the endosomal compartments, and are involved in intracellular protein trafficking, similar to Vps4 protein in yeast. The gene encoding this paralog has been mapped to chromosome 18; the gene for the other resides on chromosome 16. [provided by RefSeq].

References

Morita, E., et al. Proc. Natl. Acad. Sci. U.S.A. 107(29):12889-12894(2010)
McDonough, C.W., et al. Hum. Genet. (2009) In press :
Bruce, E.A., et al. Virology 390(2):268-278(2009)
Inoue, M., et al. Traffic 9(12):2180-2189(2008)
Stuchell-Brereton, M.D., et al. Nature 449(7163):740-744(2007)

Images



VPS4B Antibody (C-term) (Cat. #AP13813b) western blot analysis in Jurkat cell line lysates (35ug/lane).This demonstrates the VPS4B antibody detected the VPS4B protein (arrow).

Citations

- Vacuolar Protein Sorting 4B (VPS4B) Regulates Apoptosis of Chondrocytes via p38 Mitogen-Activated Protein Kinases (MAPK) in Osteoarthritis.