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VPS4A Antibody (N-term)

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP20724a

Product Information

Application	WB, E
Primary Accession	Q9UN37
Reactivity	Human
Predicted	Mouse, Rat, Bovine, Canine, Rabbit, Chicken
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB49739
Calculated MW	48898

Additional Information

Gene ID	27183
Other Names	Vacuolar protein sorting-associated protein 4A, Protein SKD2, VPS4-1, hVPS4, VPS4A {ECO:0000312|EMBL:AAG014701}
Target/Specificity	This VPS4A antibody is generated from a rabbit immunized with a KLH conjugated synthetic peptide between 44-77amino acids from the N-terminal region of human VPS4A.
Dilution	WB~~1:1000 E~~Use at an assay dependent concentration.
Format	Purified polyclonal antibody supplied in PBS with 0.05% (V/V) Proclin 300. 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	VPS4A Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	VPS4A {ECO:0000312|EMBL:AAG01470.1}
Function	Involved in late steps of the endosomal multivesicular bodies (MVB) pathway. Recognizes membrane-associated ESCRT-III assemblies and catalyzes their disassembly, possibly in combination with membrane fission. 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. It is required for proper accomplishment of various processes including the regulation of endosome size, primary cilium organization, mitotic spindle organization, chromosome segregation, and nuclear envelope sealing and spindle disassembly during anaphase (PubMed:33186545). Involved in cytokinesis: retained at the midbody by ZFYVE19/ANCHR and CHMP4C until abscission checkpoint signaling is terminated at late cytokinesis. It is then released following dephosphorylation of CHMP4C, leading to abscission (PubMed:24814515). VPS4A/B are required for the exosomal release of SDCBP, CD63 and syndecan (PubMed:22660413). Critical for normal erythroblast cytokinesis and correct erythropoiesis (PubMed:33186543).
Cellular Location	Late endosome membrane {ECO:0000250|UniProtKB:Q8VEJ9}; Peripheral membrane protein {ECO:0000250|UniProtKB:Q8VEJ9}. Midbody Cytoplasm, cytoskeleton, spindle Note=Membrane-associated in the prevacuolar endosomal compartment Localizes to the midbody of dividing cells, interaction with ZFYVE19/ANCHR mediates retention at midbody (PubMed:24814515) Localized in two distinct rings on either side of the Flemming body
Tissue Location	Ubiquitously expressed.

Background

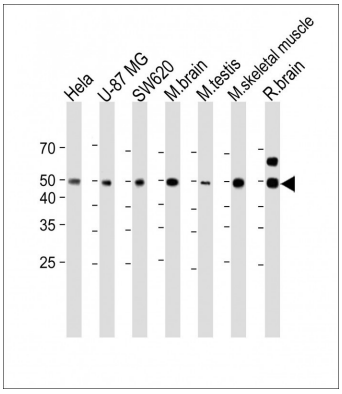
Involved in late steps of the endosomal multivesicular bodies (MVB) pathway. Recognizes membrane-associated ESCRT-III assemblies and catalyzes their disassembly, possibly in combination with membrane fission. Redistributes the ESCRT-III components to the cytoplasm for further rounds of MVB sorting. MVBs 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. In conjunction with the ESCRT machinery also appears to function in topologically equivalent membrane fission events, such as the terminal stages of cytokinesis and enveloped virus budding (HIV-1 and other lentiviruses). Involved in cytokinesis.

References

Scheuring S.,et al.J. Mol. Biol. 312:469-480(2001).
Beyer A.,et al.Gene 305:47-59(2003).
Ding J.B.,et al.Submitted (MAR-1999) to the EMBL/GenBank/DDBJ databases.
Patejunas G.,et al.Submitted (JUN-1999) to the EMBL/GenBank/DDBJ databases.
Hu R.-M.,et al.Proc. Natl. Acad. Sci. U.S.A. 97:9543-9548(2000).

Images

All lanes: Anti-VPS4A Antibody (N-term) at 1:1000 dilution Lane 1: Hela whole cell lysate Lane 2: U-87 MG whole cell lysate Lane 3: SW620 whole cell lysate Lane 4: Mouse brain lysate Lane 5: Mouse testis lysate Lane 6: Mouse skeletal muscle whole cell lysate Lane 7: Rat brain lysate Lysates/proteins at 20 µg per lane. Secondary: Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated (ASP1615)



at 1/15000 dilution. Observed band size: 49 KDa
Blocking/Dilution buffer: 5% NFDM/TBST.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.