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VPS4A Antibody (N-term)
Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP20724a

Specification

VPS4A Antibody (N-term) - Product Information

Application	**WB,E**
Primary Accession	Q9UN37
Other Accession	Q793F9, Q8VEJ9
Reactivity	**Human**
Predicted	**Mouse, Rat**
Host	**Rabbit**
Clonality	**Polyclonal**
Isotype	**Rabbit IgG**
Calculated MW	**48898**

VPS4A Antibody (N-term) - 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

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
VPS4A Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

VPS4A Antibody (N-term) - 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.

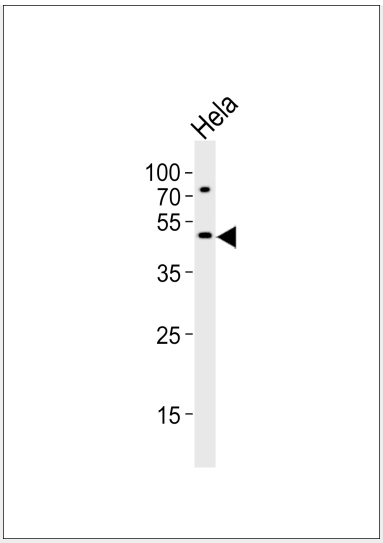
VPS4A Antibody (N-term) - Protocols

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

VPS4A Antibody (N-term) - Images

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Western blot analysis of lysate from Hela cell line, using VPS4A Antibody (N-term)(Cat. #AP20724a). AP20724a was diluted at 1:1000. A goat anti-rabbit IgG H&L(HRP) at 1:5000 dilution was used as the secondary antibody. Lysate at 35ug.

VPS4A Antibody (N-term) - 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.

VPS4A Antibody (N-term) - References

Scheuring S.,et al.J. Mol. Biol. 312:469-480(2001).
Beyer A.,et al.Gene 305:47-59(2003).
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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).