

VPS4A Blocking Peptide (N-term)

Synthetic peptide

Catalog # BP20724a

Specification

VPS4A Blocking Peptide (N-term) - Product Information

Primary Accession

[O9UN37](#)

Other Accession

[O793F9](#), [O8VEJ9](#)**VPS4A Blocking Peptide (N-term) - Additional Information**

Gene ID 27183

Other NamesVacuolar protein sorting-associated protein 4A, Protein SKD2, VPS4-1, hVPS4, VPS4A
{ECO:0000312|EMBL:AAG014701}**Target/Specificity**

The synthetic peptide sequence is selected from aa 44-57 of HUMAN VPS4A

Format

Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

Precautions

This product is for research use only. Not for use in diagnostic or therapeutic procedures.

VPS4A Blocking Peptide (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 Blocking Peptide (N-term) - Protocols

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

- [Blocking Peptides](#)

VPS4A Blocking Peptide (N-term) - Images

VPS4A Blocking Peptide (N-term) - Background

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VPS4A Blocking Peptide (N-term) - 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).