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CHMP4A Blocking Peptide (C-term)

Synthetic peptide
Catalog # BP21067a

Specification

CHMP4A Blocking Peptide (C-term) - Product Information

Primary Accession Q9BY43

CHMP4A Blocking Peptide (C-term) - Additional Information

Gene ID 29082

Other Names
Charged multivesicular body protein 4a, Chromatin-modifying protein 4a, CHMP4a, SNF7 homolog associated with Alix-2, SNF7-1, hSnf-1, Vacuolar protein sorting-associated protein 32-1, Vps32-1, hVps32-1, CHMP4A, C14orf123, SHAX2

Target/Specificity
The synthetic peptide sequence is selected from aa 205-219 of HUMAN CHMP4A

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.

CHMP4A Blocking Peptide (C-term) - Protein Information

Name CHMP4A

Synonyms C14orf123, SHAX2

Function
Probable core component of the endosomal sorting required for transport complex III (ESCRT-III) which is involved in multivesicular bodies (MVBs) formation and sorting of endosomal cargo proteins into MVBs. 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. The MVB pathway appears to require the sequential function of ESCRT-O, -I,-II and -III complexes. ESCRT-III proteins mostly dissociate from the invaginating membrane before the ILV is released. The ESCRT machinery also functions in topologically equivalent membrane fission events, such as the terminal stages of cytokinesis and the budding of enveloped viruses (HIV-1 and other lentiviruses). ESCRT-III proteins are believed to mediate the necessary vesicle extrusion and/or membrane fission activities, possibly in conjunction with the

AAA ATPase VPS4. When overexpressed, membrane-assembled circular arrays of CHMP4A filaments can promote or stabilize negative curvature and outward budding. Via its interaction with PDCD6IP involved in HIV-1 p6- and p9-dependent virus release. CHMP4A/B/C are required for the exosomal release of SDCBP, CD63 and syndecan (PubMed:22660413).

Cellular Location
Cytoplasmic vesicle membrane. Late endosome membrane; Peripheral membrane protein Note=Membrane-associated. Localizes to large vesicle-like structures Localizes to the midbody of dividing cells. Localized in two distinct rings on either side of the Fleming body

Tissue Location
Widely expressed. Expressed at higher level in heart, kidney, liver and skeletal muscle. Also expressed in brain, placenta, lung and pancreas.

CHMP4A Blocking Peptide (C-term) - Protocols

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

- Blocking Peptides

CHMP4A Blocking Peptide (C-term) - Images

CHMP4A Blocking Peptide (C-term) - Background

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CHMP4A Blocking Peptide (C-term) - References

Katoh K.,et al.J. Biol. Chem. 278:39104-39113(2003).
Peck J.W.,et al.Biochem. J. 377:693-700(2004).
Li Y.,et al.Submitted (DEC-1999) to the EMBL/GenBank/DDBJ databases.
Zhang Q.-H.,et al.Genome Res. 10:1546-1560(2000).
Li W.B.,et al.Submitted (FEB-2003) to the EMBL/GenBank/DDBJ databases.