

**CHMP4B Antibody (N-term) Blocking Peptide****Synthetic peptide****Catalog # BP9528a****Specification**

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**CHMP4B Antibody (N-term) Blocking Peptide - Product Information**

Primary Accession

[O9H444](#)

Other Accession

[NP\\_789782](#)**CHMP4B Antibody (N-term) Blocking Peptide - Additional Information****Gene ID** 128866**Other Names**

Charged multivesicular body protein 4b, Chromatin-modifying protein 4b, CHMP4b, SNF7 homolog associated with Alix 1, SNF7-2, hSnf7-2, Vacuolar protein sorting-associated protein 32-2, Vps32-2, hVps32-2, CHMP4B, C20orf178, SHAX1

**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.

**CHMP4B Antibody (N-term) Blocking Peptide - Protein Information****Name** CHMP4B**Synonyms** C20orf178, SHAX1**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 (PubMed:<a href="http://www.uniprot.org/citations/12860994" target="\_blank">12860994</a>, PubMed:<a href="http://www.uniprot.org/citations/18209100" target="\_blank">18209100</a>). The ESCRT machinery also functions in topologically equivalent membrane fission events, such as the terminal stages of cytokinesis (PubMed:<a href="http://www.uniprot.org/citations/21310966" target="\_blank">21310966</a>). Together with SPAST, the ESCRT-III complex promotes nuclear

envelope sealing and mitotic spindle disassembly during late anaphase (PubMed:<a href="http://www.uniprot.org/citations/26040712" target="\_blank">26040712</a>). Plays a role in the endosomal sorting pathway. 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 CHMP4B filaments can promote or stabilize negative curvature and outward budding. CHMP4A/B/C are required for the exosomal release of SDCBP, CD63 and syndecan (PubMed:<a href="http://www.uniprot.org/citations/22660413" target="\_blank">22660413</a>). Majority of the protein exists in a folded closed conformation (PubMed:<a href="http://www.uniprot.org/citations/33349255" target="\_blank">33349255</a>).

#### **Cellular Location**

Cytoplasm, cytosol. Late endosome membrane; Peripheral membrane protein. Midbody. Nucleus envelope. Note=Recruited to the nuclear envelope by CHMP7 during late anaphase (PubMed:26040712). Localizes transiently to the midbody arms immediately before abscission (PubMed:22422861)

#### **Tissue Location**

Widely expressed. Expressed at higher level in heart and skeletal muscle. Also expressed in brain, colon, thymus, spleen, kidney, liver, small intestine, placenta, lung and peripheral blood lymphocytes.

### **CHMP4B Antibody (N-term) Blocking Peptide - Protocols**

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

- [Blocking Peptides](#)

### **CHMP4B Antibody (N-term) Blocking Peptide - Images**

### **CHMP4B Antibody (N-term) Blocking Peptide - Background**

CHMP4B is a member of the chromatin-modifying protein/charged multivesicular body protein (CHMP) protein family. The protein is part of the endosomal sorting complex required for transport (ESCRT) complex III (ESCRT-III), which functions in the sorting of endocytosed cell-surface receptors into multivesicular endosomes. The ESCRT machinery also functions in the final abscission stage of cytokinesis and in the budding of enveloped viruses such as HIV-1. The three proteins of the CHMP4 subfamily interact with programmed cell death 6 interacting protein (PDCD6IP, also known as ALIX), which also functions in the ESCRT pathway. The CHMP4 proteins assemble into membrane-attached 5-nm filaments that form circular scaffolds and promote or stabilize outward budding. These polymers are proposed to help generate the luminal vesicles of multivesicular bodies.

### **CHMP4B Antibody (N-term) Blocking Peptide - References**

Zhou, X., et al. Biochem. J. 418(2):277-284(2009) McCullough, J., et al. Proc. Natl. Acad. Sci. U.S.A. 105(22):7687-7691(2008) Ichioka, F., et al. FEBS J. 275(4):682-692(2008) Hanson, P.I., et al. J. Cell Biol. 180(2):389-402(2008) Shiels, A., et al. Am. J. Hum. Genet. 81(3):596-606(2007)