

## VPS11 Antibody (C-term) Blocking Peptide

Synthetic peptide Catalog # BP16504b

## **Specification**

#### VPS11 Antibody (C-term) Blocking Peptide - Product Information

Primary Accession

**Q9H270** 

# VPS11 Antibody (C-term) Blocking Peptide - Additional Information

**Gene ID** 55823

#### **Other Names**

Vacuolar protein sorting-associated protein 11 homolog, hVPS11, RING finger protein 108, VPS11, RNF108

#### **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.

## VPS11 Antibody (C-term) Blocking Peptide - Protein Information

Name VPS11

Synonyms RNF108

#### **Function**

Plays a role in vesicle-mediated protein trafficking to lysosomal compartments including the endocytic membrane transport and autophagic pathways. Believed to act as a core component of the putative HOPS and CORVET endosomal tethering complexes which are proposed to be involved in the Rab5-to-Rab7 endosome conversion probably implicating MON1A/B, and via binding SNAREs and SNARE complexes to mediate tethering and docking events during SNARE-mediated membrane fusion. The HOPS complex is proposed to be recruited to Rab7 on the late endosomal membrane and to regulate late endocytic, phagocytic and autophagic traffic towards lysosomes. The CORVET complex is proposed to function as a Rab5 effector to mediate early endosome fusion probably in specific endosome subpopulations (PubMed:<a href="http://www.uniprot.org/citations/11382755" target="\_blank">11382755</a>/a>, PubMed:<a href="http://www.uniprot.org/citations/23351085" target="\_blank">23351085</a>/a>, PubMed:<a href="http://www.uniprot.org/citations/24554770" target="\_blank">24554770</a>/a>, PubMed:<a href="http://www.uniprot.org/citations/25266290" target="\_blank">25266290</a>/a>, PubMed:<a href="http://www.uniprot.org/citations/25783203" target="\_blank">25783203</a>/a>). Required for fusion of endosomes and autophagosomes with lysosomes (PubMed:<a





href="http://www.uniprot.org/citations/25783203" target=" blank">25783203</a>). Involved in cargo transport from early to late endosomes and required for the transition from early to late endosomes (PubMed: <a href="http://www.uniprot.org/citations/21148287" target=" blank">21148287</a>). Involved in the retrograde Shiga toxin transport (PubMed:<a href="http://www.uniprot.org/citations/23593995" target=" blank">23593995</a>).

# **Cellular Location**

Endosome. Late endosome membrane; Peripheral membrane protein; Cytoplasmic side. Lysosome membrane; Peripheral membrane protein; Cytoplasmic side. Early endosome {ECO:0000269|PubMed:21148287, ECO:0000305}. Cytoplasmic vesicle. Cytoplasmic vesicle, autophagosome. Cytoplasmic vesicle, clathrin-coated vesicle

#### **Tissue Location**

Ubiquitous. Expression was highest in heart and low in lung

## VPS11 Antibody (C-term) Blocking Peptide - Protocols

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

## Blocking Peptides

VPS11 Antibody (C-term) Blocking Peptide - Images

#### VPS11 Antibody (C-term) Blocking Peptide - Background

Vesicle mediated protein sorting plays an important rolein segregation of intracellular molecules into distinct organelles. Genetic studies in yeast have identified more than 40 vacuolar protein sorting (VPS) genes involved in vesicle transport tovacuoles. This gene encodes the human homolog of yeast class CVps11 protein. The mammalian class C Vps proteins are predominantly associated with late endosomes/lysosomes, and like their yeast counterparts, may mediate vesicle trafficking steps in theendosome/lysosome pathway.

## VPS11 Antibody (C-term) Blocking Peptide - References

Bailey, S.D., et al. Diabetes Care (2010) In press: Talmud, P.J., et al. Am. J. Hum. Genet. 85(5):628-642(2009)Zhu, G.D., et al. Mol. Biol. Cell 20(4):1223-1240(2009)Wan, D., et al. Proc. Natl. Acad. Sci. U.S.A. 101(44):15724-15729(2004)Lehner, B., et al. Genome Res. 14(7):1315-1323(2004)