

# **AUP1 Antibody (C-term) Blocking Peptide**

Synthetic peptide Catalog # BP16554b

## **Specification**

# AUP1 Antibody (C-term) Blocking Peptide - Product Information

**Primary Accession** 

**09Y679** 

# AUP1 Antibody (C-term) Blocking Peptide - Additional Information

Gene ID 550

#### **Other Names**

Ancient ubiquitous protein 1, AUP1

### **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.

# AUP1 Antibody (C-term) Blocking Peptide - Protein Information

Name AUP1 (HGNC:891)

#### **Function**

Plays a role in the translocation of terminally misfolded proteins from the endoplasmic reticulum lumen to the cytoplasm and their degradation by the proteasome (PubMed:<a href="http://www.uniprot.org/citations/18711132" target="\_blank">18711132</a>, PubMed:<a href="http://www.uniprot.org/citations/21857022" target="blank">21857022</a>). Plays a role in lipid droplet formation (PubMed: <a href="http://www.uniprot.org/citations/21857022" target=" blank">21857022</a>). Induces lipid droplet clustering (PubMed:<a href="http://www.uniprot.org/citations/24039768" target="\_blank">24039768</a>). Recruits ubiquitin- conjugating enzyme UBE2G2 to lipid droplets which facilitates its interaction with ubiquitin ligases AMFR/gp78 and RNF139/TRC8, leading to sterol-induced ubiquitination of HMGCR and its subsequent proteasomal degradation (PubMed: <a href="http://www.uniprot.org/citations/23223569" target=" blank">23223569</a>, PubMed:<a href="http://www.uniprot.org/citations/21127063" target="blank">21127063</a>). Also required for the degradation of INSIG1, SREBF1 and SREBF2 (PubMed:<a href="http://www.uniprot.org/citations/23223569" target="\_blank">23223569</a>). Plays a role in regulating assembly and secretion of very low density lipoprotein particles and stability of apolipoprotein APOB (PubMed: <a href="http://www.uniprot.org/citations/28183703" target="\_blank">28183703</a>).



### **Cellular Location**

Endoplasmic reticulum membrane; Peripheral membrane protein. Lipid droplet

### **Tissue Location**

Detected in blood platelets and leukocytes (at protein level). Ubiquitous. Highly expressed in placenta, liver, kidney, skeletal muscle, heart and brain

# AUP1 Antibody (C-term) Blocking Peptide - Protocols

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

# Blocking Peptides

AUP1 Antibody (C-term) Blocking Peptide - Images

## AUP1 Antibody (C-term) Blocking Peptide - Background

This gene encodes a protein that contains a domain withhomology to the ancient conserved region of the archain 1 gene and domain that may be involved in binding ubiquitin-conjugatingenzymes. The protein encoded by this gene has been shown to bind tothe conserved membrane-proximal sequence of the cytoplasmic tail ofintegrin alpha(IIb) subunits. These subunits play a crucial role inthe integrin alpha(IIb)beta(3) inside-out signalling in plateletsand megakaryocytes that leads to platelet aggregation and thrombusformation. This gene overlaps the gene for mitochondrial serineprotease 25.

## AUP1 Antibody (C-term) Blocking Peptide - References

Ewing, R.M., et al. Mol. Syst. Biol. 3, 89 (2007) :Kato, A., et al. J. Biol. Chem. 277(32):28934-28941(2002)Karpisheva, K.V., et al. Tsitologiia 44(9):846-851(2002)Karpisheva, K.V., et al. Tsitologiia 44(9):839-845(2002) lang, W., et al. Genomics 36(2):366-368(1996)