

## LMBD1 Antibody (Center) Blocking Peptide

Synthetic peptide Catalog # BP9701c

# **Specification**

## LMBD1 Antibody (Center) Blocking Peptide - Product Information

**Primary Accession** 

**Q9NUN5** 

# LMBD1 Antibody (Center) Blocking Peptide - Additional Information

**Gene ID 55788** 

#### **Other Names**

Probable lysosomal cobalamin transporter, HDAg-L-interacting protein NESI, LMBR1 domain-containing protein 1, Nuclear export signal-interacting protein, LMBRD1, C6orf209, NESI

#### **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.

### LMBD1 Antibody (Center) Blocking Peptide - Protein Information

Name LMBRD1 (HGNC:23038)

Synonyms C6orf209, NESI

#### **Function**

Lysosomal membrane chaperone required to export cobalamin (vitamin B12) from the lysosome to the cytosol, allowing its conversion to cofactors (PubMed:<a

href="http://www.uniprot.org/citations/19136951" target="\_blank">19136951</a>). Targets ABCD4 transporter from the endoplasmic reticulum to the lysosome (PubMed:<a href="http://www.uniprot.org/citations/27456980" target="\_blank">27456980</a>). Then forms a complex with lysosomal ABCD4 and cytoplasmic MMACHC to transport cobalamin across the lysosomal membrane (PubMed:<a href="http://www.uniprot.org/citations/25535791" target="\_blank">25535791" target="\_blank">25535791</a>). Acts as an adapter protein which plays an important role in mediating and regulating the internalization of the insulin receptor (INSR) (By similarity). Involved in clathrin-mediated endocytosis of INSR via its interaction with adapter protein complex 2 (By similarity). Essential for the initiation of gastrulation and early formation of mesoderm structures during embryogenesis (By similarity).

### **Cellular Location**

Endoplasmic reticulum membrane. Lysosome membrane; Multi-pass membrane protein. Cell



membrane {ECO:0000250|UniProtKB:Q8K0B2}; Multi-pass membrane protein. Cytoplasmic vesicle, clathrin-coated vesicle {ECO:0000250|UniProtKB:Q8K0B2}

**Tissue Location** Isoform 3 is expressed in liver.

### LMBD1 Antibody (Center) Blocking Peptide - Protocols

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

### Blocking Peptides

LMBD1 Antibody (Center) Blocking Peptide - Images

# LMBD1 Antibody (Center) Blocking Peptide - Background

LMBD1 is a lysosomal membrane protein that may be involved in the transport and metabolism of cobalamin. This protein also interacts with the large form of the hepatitis delta antigen and may be required for the nucleocytoplasmic shuttling of the hepatitis delta virus.

# LMBD1 Antibody (Center) Blocking Peptide - References

Rutsch, F., et al. Nat. Genet. 41(2):234-239(2009)Wang, Y.H., et al. J. Virol. 79(13):8113-8120(2005)Mungall, A.J., et al. Nature 425(6960):805-811(2003)