

PLEKHM1 Antibody (N-term) Blocking peptide
Synthetic peptide
Catalog # BP13049a**Specification**

PLEKHM1 Antibody (N-term) Blocking peptide - Product InformationPrimary Accession [O9Y4G2](#)**PLEKHM1 Antibody (N-term) Blocking peptide - Additional Information**

Gene ID 9842

Other Names

Pleckstrin homology domain-containing family M member 1, PH domain-containing family M member 1, 162 kDa adapter protein, AP162, PLEKHM1, KIAA0356

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.

PLEKHM1 Antibody (N-term) Blocking peptide - Protein InformationName PLEKHM1 ([HGNC:29017](#))

Synonyms KIAA0356

Function

Acts as a multivalent adapter protein that regulates Rab7- dependent and HOPS complex-dependent fusion events in the endolysosomal system and couples autophagic and the endocytic trafficking pathways. Acts as a dual effector of RAB7A and ARL8B that simultaneously binds these GTPases, bringing about clustering and fusion of late endosomes and lysosomes (PubMed: [25498145](http://www.uniprot.org/citations/25498145), PubMed: [28325809](http://www.uniprot.org/citations/28325809)). Required for late stages of endolysosomal maturation, facilitating both endocytosis- mediated degradation of growth factor receptors and autophagosome clearance. Interaction with Arl8b is a crucial factor in the terminal maturation of autophagosomes and to mediate autophagosome-lysosome fusion (PubMed: [25498145](http://www.uniprot.org/citations/25498145)). Positively regulates lysosome peripheral distribution and ruffled border formation in osteoclasts (By similarity). May be involved in negative regulation of endocytic transport from early endosome to late endosome/lysosome implicating its association with Rab7 (PubMed: [20943950](http://www.uniprot.org/citations/20943950)). May have a role in sialyl-le^x- mediated transduction of apoptotic signals (PubMed: [20943950](#)).

href="http://www.uniprot.org/citations/12820725" target="_blank">12820725). Involved in bone resorption (By similarity).

Cellular Location

Autolysosome membrane. Endosome membrane. Late endosome membrane. Lysosome membrane. Note=In case of infection colocalizes with Salmonella typhimurium sifA in proximity of Salmonella-containing vacuole (SCV) (PubMed:25500191).

Tissue Location

Expressed in placenta, liver, prostate, thymus, spleen, ovary, colon, colon carcinoma and peripheral blood lymphocytes (PBL). Weakly expressed in brain, lung, kidney, and testis. No expression in heart, skeletal muscle, pancreas and small intestine Predominantly expressed in the breast carcinoma cell line MCF-7

PLEKHM1 Antibody (N-term) Blocking peptide - Protocols

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

- [Blocking Peptides](#)

PLEKHM1 Antibody (N-term) Blocking peptide - Images**PLEKHM1 Antibody (N-term) Blocking peptide - Background**

The protein encoded by this gene is essential for bone resorption, and may play a critical role in vesicular transport in the osteoclast. Mutations in this gene are associated with autosomal recessive osteopetrosis type 6 (OPTB6). Alternatively spliced transcript variants have been found for this gene.

PLEKHM1 Antibody (N-term) Blocking peptide - References

Edwards, T.L., et al. Ann. Hum. Genet. 74(2):97-109(2010) Del Fattore, A., et al. J. Bone Miner. Res. 23(3):380-391(2008) Van Wesenbeeck, L., et al. J. Clin. Invest. 117(4):919-930(2007) Hartel-Schenk, S., et al. Glycoconj. J. 18 (11-12), 915-923 (2001) :