

PLEKHM1 Antibody (N-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP13049a

Specification

PLEKHM1 Antibody (N-term) - Product Information

Application WB.E **Primary Accession** 09Y4G2 NP 055613.1 Other Accession Reactivity Human Host **Rabbit** Clonality **Polyclonal** Isotype Rabbit IgG Calculated MW 117443 Antigen Region 50-78

PLEKHM1 Antibody (N-term) - 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

Target/Specificity

This PLEKHM1 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 50-78 amino acids from the N-terminal region of human PLEKHM1.

Dilution

WB~~1:1000

E~~Use at an assay dependent concentration.

Format

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

Storage

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions

PLEKHM1 Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

PLEKHM1 Antibody (N-term) - Protein Information

Name 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, PubMed: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). 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). May have a role in sialyl-lex- mediated transduction of apoptotic signals (PubMed: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

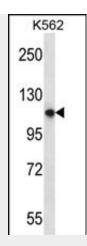
PLEKHM1 Antibody (N-term) - Protocols

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

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

PLEKHM1 Antibody (N-term) - Images





PLEKHM1 Antibody (N-term) (Cat. #AP13049a) western blot analysis in K562 cell line lysates (35ug/lane). This demonstrates the PLEKHM1 antibody detected the PLEKHM1 protein (arrow).

PLEKHM1 Antibody (N-term) - 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) - 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):