

GAPVD1 Antibody (C-term) Blocking PeptideSynthetic peptide
Catalog # BP6872b**Specification****GAPVD1 Antibody (C-term) Blocking Peptide - Product Information**Primary Accession [O14C86](#)**GAPVD1 Antibody (C-term) Blocking Peptide - Additional Information**

Gene ID 26130

Other Names

GTPase-activating protein and VPS9 domain-containing protein 1, GAPex-5, Rab5-activating protein 6, GAPVD1, GAPEX5, KIAA1521, RAP6

Target/Specificity

The synthetic peptide sequence used to generate the antibody [AP6872b](/products/AP6872b) was selected from the C-term region of human GAPVD1. A 10 to 100 fold molar excess to antibody is recommended. Precise conditions should be optimized for a particular assay.

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.

GAPVD1 Antibody (C-term) Blocking Peptide - Protein Information

Name GAPVD1

GAPVD1 Antibody (C-term) Blocking Peptide - Background

GAPVD1 acts both as a GTPase-activating protein (GAP) and a guanine nucleotide exchange factor (GEF), and participates in various processes such as endocytosis, insulin receptor internalization or LC2A4/GLUT4 trafficking. Acts as a GEF for the Ras-related protein RAB31 by exchanging bound GDP for free GTP, leading to regulate LC2A4/GLUT4 trafficking. In the absence of insulin, it maintains RAB31 in an active state and promotes a futile cycle between LC2A4/GLUT4 storage vesicles and early endosomes, retaining LC2A4/GLUT4 inside the cells. Upon insulin stimulation, it is translocated to the plasma membrane, releasing LC2A4/GLUT4 from intracellular storage vesicles. Also involved in EGFR trafficking and degradation, possibly by promoting EGFR ubiquitination and subsequent degradation by the proteasome. Has GEF activity for Rab5 and GAP activity for Ras.

GAPVD1 Antibody (C-term) Blocking Peptide - References

Matsuoka,S., et.al., Science 316 (5828), 1160-1166 (2007)

Synonyms GAPEX5, KIAA1521, RAP6

Function

Acts both as a GTPase-activating protein (GAP) and a guanine nucleotide exchange factor (GEF), and participates in various processes such as endocytosis, insulin receptor internalization or LC2A4/GLUT4 trafficking. Acts as a GEF for the Ras-related protein RAB31 by exchanging bound GDP for free GTP, leading to regulate LC2A4/GLUT4 trafficking. In the absence of insulin, it maintains RAB31 in an active state and promotes a futile cycle between LC2A4/GLUT4 storage vesicles and early endosomes, retaining LC2A4/GLUT4 inside the cells. Upon insulin stimulation, it is translocated to the plasma membrane, releasing LC2A4/GLUT4 from intracellular storage vesicles. Also involved in EGFR trafficking and degradation, possibly by promoting EGFR ubiquitination and subsequent degradation by the proteasome. Has GEF activity for Rab5 and GAP activity for Ras.

Cellular Location

Membrane; Peripheral membrane protein. Endosome. Note=Recruited to the plasma membrane by TRIP10/CIP4 in response to insulin

GAPVD1 Antibody (C-term) Blocking Peptide - Protocols

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

- [Blocking Peptides](#)