

Anti-VPS34 Antibody

Rabbit polyclonal antibody to VPS34 Catalog # AP61540

Specification

Anti-VPS34 Antibody - Product Information

Application WB
Primary Accession O8NEB9
Other Accession O6PF93

Reactivity Human, Mouse, Rat, Pig

Host Rabbit
Clonality Polyclonal
Calculated MW 101549

Anti-VPS34 Antibody - Additional Information

Gene ID 5289

Other Names

VPS34; Phosphatidylinositol 3-kinase catalytic subunit type 3; PI3-kinase type 3; PI3K type 3; PtdIns-3-kinase type 3; Phosphatidylinositol 3-kinase p100 subunit; Phosphoinositide-3-kinase class 3; hVps34

Target/Specificity

Recognizes endogenous levels of VPS34 protein.

Dilution

WB~~WB (1/500 - 1/2000)

Format

Liquid in 0.42% Potassium phosphate, 0.87% Sodium chloride, pH 7.3, 30% glycerol, and 0.09% (W/V) sodium azide.

Storage

Store at -20 °C.Stable for 12 months from date of receipt

Anti-VPS34 Antibody - Protein Information

Name PIK3C3 (HGNC:8974)

Synonyms VPS34 {ECO:0000305}

Function

Catalytic subunit of the PI3K complex that mediates formation of phosphatidylinositol 3-phosphate; different complex forms are believed to play a role in multiple membrane trafficking pathways: PI3KC3-C1 is involved in initiation of autophagosomes and PI3KC3-C2 in maturation of autophagosomes and endocytosis (PubMed:14617358, PubMed:<a href="http://www.uniprot.org/citations/33637724"



target="_blank">33637724, PubMed:7628435). As part of PI3KC3-C1, promotes endoplasmic reticulum membrane curvature formation prior to vesicle budding (PubMed:32690950). Involved in regulation of degradative endocytic trafficking and required for the abscission step in cytokinesis, probably in the context of PI3KC3-C2 (PubMed:20208530, PubMed:20643123). Involved in the transport of lysosomal enzyme precursors to lysosomes (By similarity). Required for transport from early to late endosomes (By similarity).

Cellular Location

Midbody. Late endosome. Cytoplasmic vesicle, autophagosome. Note=As component of the PI3K complex I localized to pre-autophagosome structures. As component of the PI3K complex II localized predominantly to endosomes (PubMed:14617358). Also localizes to discrete punctae along the ciliary axoneme and to the base of the ciliary axoneme (By similarity) {ECO:0000250|UniProtKB:Q6PF93, ECO:0000305|PubMed:14617358}

Tissue Location

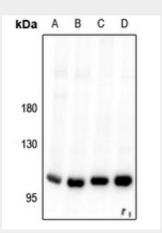
Ubiquitously expressed, with a highest expression in skeletal muscle.

Anti-VPS34 Antibody - Protocols

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

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- <u>Immunoprecipitation</u>
- Flow Cytomety
- Cell Culture

Anti-VPS34 Antibody - Images



Western blot analysis of VPS34 expression in C6 (A), AML12 (B), H1792 (C), MCF7 (D) whole cell lysates.

Anti-VPS34 Antibody - Background





KLH-conjugated synthetic peptide encompassing a sequence within the center region of human VPS34. The exact sequence is proprietary.