10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

Anti-VPS34 Antibody
Rabbit polyclonal antibody to VPS34
Catalog # AP61540

Specification

Anti-VPS34 Antibody - Product Information

Application	**WB**
Primary Accession	Q8NEB9
Other Accession	Q6PF93
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). Localizes also 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}

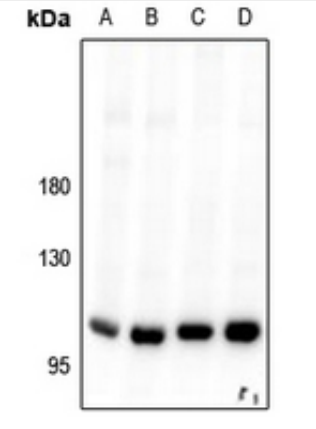
Tissue Location
Ubiquitously expressed, with a highest expression in skeletal muscle.

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
- Immunoprecipitation
- 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

10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

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