

PI 3 Kinase Class 3 Antibody

Rabbit mAb Catalog # AP90362

Product Information

Application Primary Accession Reactivity Clonality Other Names	WB, IHC <u>Q8NEB9</u> Rat, Human, Mouse Monoclonal PI3-kinase type 3; PI3K type 3; PI3 kinase type 3; Phosphatidylinositol 3-kinase p100 subunit; Phosphoinositide-3-kinase class 3; hVps34; PIK3C3; Vps 34; Vps34
Isotype	Rabbit IgG
Host	Rabbit
Calculated MW	101549

Additional Information

Dilution Purification Immunogen	WB 1:500~1:2000 IHC 1:50~1:200 Affinity-chromatography A synthesized peptide derived from human PI 3 Kinase Class 3
Description	Catalytic subunit of the PI3K complex that mediates formation of phosphatidylinositol 3-phosphate. Involved in the transport of lysosomal enzyme precursors to lysosomes. Required for the abcission step in cytokinesis.
Storage Condition and Buffer	Rabbit IgG in phosphate buffered saline , pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol. Store at +4°C short term. Store at -20°C long term. Avoid freeze / thaw cycle.

Protein Information

Name	PIK3C3 (<u>HGNC:8974</u>)
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: <u>14617358</u> , PubMed: <u>33637724</u> , PubMed: <u>7628435</u>). As part of PI3KC3-C1, promotes endoplasmic reticulum membrane curvature formation prior to vesicle budding (PubMed: <u>32690950</u>). Involved in regulation of degradative endocytic trafficking and required for the abscission step in cytokinesis, probably in the context of PI3KC3-C2 (PubMed: <u>20208530</u> , PubMed: <u>20643123</u>). 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.

Images



Western blot analysis of PI 3 Kinase Class 3 expression in 293T cell lysate.

Image not found : 202311/AP90362-IHC.jpg

Immunohistochemical analysis of paraffin-embedded human kidney, using PI 3 Kinase Class 3 Antibody.

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