

VPS35 Antibody

Rabbit mAb Catalog # AP91707

Specification

VPS35 Antibody - Product Information

Application Primary Accession Reactivity Clonality Other Names hVPS35; MEM3; PARK17; VPS35;	WB, IHC, FC, ICC <u>0960K1</u> Rat Monoclonal
lsotype Host Calculated MW	Rabbit IgG Rabbit 91707 Da
VPS35 Antibody - Additional Information	
Dilution	WB~~1:1000 IHC~~1:100~500 FC~~1:10~50 ICC~~N/A
Purification Immunogen	Affinity-chromatography A synthesized peptide derived from human VPS35
Description Storage Condition and Buffer	Essential component of the retromer complex, a complex required to retrieve lysosomal enzyme receptors (IGF2R and M6PR) from endosomes to the trans-Golgi network. Also required to regulate transcytosis of the polymeric immunoglobulin receptor (plgR-plgA). 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.

VPS35 Antibody - Protein Information

Name VPS35 {ECO:0000303|PubMed:28397838, ECO:0000312|HGNC:HGNC:13487}

Function

Acts as a component of the retromer cargo-selective complex (CSC). The CSC is believed to be the core functional component of retromer or respective retromer complex variants acting to prevent missorting of selected transmembrane cargo proteins into the lysosomal degradation pathway. The recruitment of the CSC to the endosomal membrane involves RAB7A and SNX3. The CSC seems to associate with the cytoplasmic domain of cargo proteins predominantly via VPS35;



however, these interactions seem to be of low affinity and retromer SNX proteins may also contribute to cargo selectivity thus questioning the classical function of the CSC. The SNX-BAR retromer mediates retrograde transport of cargo proteins from endosomes to the trans-Golgi network (TGN) and is involved in endosome-to-plasma membrane transport for cargo protein recycling. The SNX3-retromer mediates the retrograde endosome-to-TGN transport of WLS distinct from the SNX-BAR retromer pathway (PubMed:30213940). The SNX27-retromer is believed to be involved in endosome-to-plasma membrane trafficking and recycling of a broad spectrum of cargo proteins. The CSC seems to act as recruitment hub for other proteins, such as the WASH complex and TBC1D5 (Probable). Required for retrograde transport of lysosomal enzyme receptor IGF2R and SLC11A2. Required to regulate transcytosis of the polymeric immunoglobulin receptor (plgR-plgA) (PubMed:15078903, PubMed:15247922, PubMed:20164305). Required for endosomal localization of WASHC2C (PubMed:22070227, PubMed:28892079). Mediates the association of the CSC with the WASH complex via WASHC2 (PubMed:22070227, PubMed:24819384, PubMed:24980502). Required for the endosomal localization of TBC1D5 (PubMed:20923837).

Cellular Location

Cytoplasm. Membrane; Peripheral membrane protein. Endosome Early endosome. Late endosome Note=Localizes to tubular profiles adjacent to endosomes

Tissue Location

Ubiquitous. Highly expressed in heart, brain, placenta, skeletal muscle, spleen, thymus, testis, ovary, small intestine, kidney and colon

VPS35 Antibody - Protocols

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

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

VPS35 Antibody - Images





Western blot analysis of VPS35 expression in (1) HeLa cell lysate; (2) Mouse kidney lysate.