

VPS35 Antibody (C-Terminus)

Goat Polyclonal Antibody Catalog # ALS14249

Specification

VPS35 Antibody (C-Terminus) - Product Information

Application WB, IHC-P, E
Primary Accession Q960K1

Reactivity Human, Mouse, Rat, Rabbit, Hamster,

Monkey, Horse, Bovine

Host Goat
Clonality Polyclonal
Calculated MW 92kDa KDa
Dilution WB~~1:1000

IHC-P~~N/A E~~N/A

VPS35 Antibody (C-Terminus) - Additional Information

Gene ID 55737

Other Names

Vacuolar protein sorting-associated protein 35, hVPS35, Maternal-embryonic 3, Vesicle protein sorting 35, VPS35, MEM3

Target/Specificity

Human VPS35. Note there is a hypothetical protein called similar to vacuolar protein sorting 35 (XP 040192.1), which is virtually identical.

Reconstitution & Storage

Store at -20°C. Minimize freezing and thawing.

Precautions

VPS35 Antibody (C-Terminus) is for research use only and not for use in diagnostic or therapeutic procedures.

VPS35 Antibody (C-Terminus) - 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:<a

 $href="http://www.uniprot.org/citations/22070227" target="_blank">22070227, PubMed:24819384, PubMed:24980502). Required for the endosomal localization of TBC1D5 (PubMed:<a$

href="http://www.uniprot.org/citations/20923837" target="_blank">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 (C-Terminus) - 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

VPS35 Antibody (C-Terminus) - Images





Staining (0.05 ug/ml) of human brain cerebellum lysate (RIPA buffer, 35 ug total protein per lane).

VPS35 Antibody (C-Terminus) - Background

Acts as 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. 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 (plqR-plqA) (PubMed:15078903, PubMed:15247922, PubMed:20164305). Required for endosomal localization of FAM21C (PubMed:22070227). Mediates the association of the CSC with the WASH complex via FAM21 (PubMed:22070227, PubMed:24980502, PubMed:24819384). Required for the endosomal localization of TBC1D5 (PubMed:20923837).

VPS35 Antibody (C-Terminus) - References

Edgar A.J., et al. Biochem. Biophys. Res. Commun. 277:622-630(2000). Zhang P., et al. Genomics 70:253-257(2000). Renfrew Haft C., et al. Mol. Biol. Cell 11:4105-4116(2000). Peng Y., et al. Submitted (SEP-1999) to the EMBL/GenBank/DDBJ databases. Ota T., et al. Nat. Genet. 36:40-45(2004).