

# VPS35 Polyclonal Antibody

Catalog # AP73970

## Product Information

|                   |                        |
|-------------------|------------------------|
| Application       | WB                     |
| Primary Accession | <a href="#">Q96QK1</a> |
| Reactivity        | Human, Mouse, Rat      |
| Host              | Rabbit                 |
| Clonality         | Polyclonal             |
| Calculated MW     | 91707                  |

## Additional Information

|                    |   |
|--------------------|---|
| Gene ID            | 55737   |
| Other Names        | Vacuolar protein sorting-associated protein 35 (hVPS35) (Maternal-embryonic 3) (Vesicle protein sorting 35) |
| Dilution           | WB~~WB 1:500-2000, ELISA 1:10000-20000  |
| Format             | Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.09% (W/V) sodium azide.                               |
| Storage Conditions | -20°C   |

## 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: <a href="#">30213940</a> ). 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 (pIgR-pIgA) (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

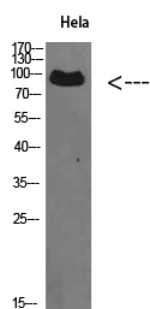
#### Tissue Location

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

## 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 (pIgR-pIgA) (PubMed:[15078903](#), PubMed:[15247922](#), PubMed:[20164305](#)). Required for endosomal localization of WASHC2C (PubMed:[22070227](#)). Mediates the association of the CSC with the WASH complex via WASHC2 (PubMed:[22070227](#), PubMed:[24980502](#), PubMed:[24819384](#)). Required for the endosomal localization of TBC1D5 (PubMed:[20923837](#)).

## Images



Western Blot analysis of HeLa cells using VPS35 Polyclonal Antibody diluted at 1:500. Secondary antibody was diluted at 1:20000

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.