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VPS29 Antibody (Internal)
Goat Polyclonal Antibody
Catalog # ALS13088

Specification

VPS29 Antibody (Internal) - Product Information

Application	**IHC**
Primary Accession	Q9UBQ0
Reactivity	**Human, Mouse, Rat, Rabbit, Zebrafish, Hamster, Monkey, Pig, Horse, Bovine, Dog**
Host	**Goat**
Clonality	**Polyclonal**
Calculated MW	**21kDa KDa**

VPS29 Antibody (Internal) - Additional Information

Gene ID 51699

Other Names
Vacuolar protein sorting-associated protein 29, hVPS29, PEP11 homolog, Vesicle protein sorting 29, VPS29

Target/Specificity
Human VPS29. This antibody is expected to recognise both reported isoforms (NP_057310.1 and NP_476528.1).

Reconstitution & Storage
Store at -20°C. Minimize freezing and thawing.

Precautions
VPS29 Antibody (Internal) is for research use only and not for use in diagnostic or therapeutic procedures.

VPS29 Antibody (Internal) - Protein Information

Name VPS29 {ECO:0000303|PubMed:30213940, ECO:0000312|HGNC:HGNC:14340}

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 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. Required to regulate transcytosis of the polymeric immunoglobulin receptor (pIgR- pIgA) (PubMed:15247922, PubMed:21725319, PubMed:23563491). Acts also as component of the retriever complex. The retriever complex is a heterotrimeric complex related to retromer cargo-selective complex (CSC) and essential for retromer-independent retrieval and recycling of numerous cargos such as integrin alpha-5/beta-1 (ITGA5:ITGB1) (PubMed:28892079). In the endosomes, retriever complex drives the retrieval and recycling of NxxY-motif-containing cargo proteins by coupling to SNX17, a cargo essential for the homeostatic maintenance of numerous cell surface proteins associated with processes that include cell migration, cell adhesion, nutrient supply and cell signaling (PubMed:28892079). The recruitment of the retriever complex to the endosomal membrane involves CCC and WASH complexes (PubMed:28892079). Involved in GLUT1 endosome-to-plasma membrane trafficking; the function is dependent of association with ANKRD27 (PubMed:24856514).

Cellular Location
Cytoplasm. Membrane; Peripheral membrane protein. Endosome membrane {ECO:0000250|UniProtKB:Q9QZ88}; Peripheral membrane protein {ECO:0000250|UniProtKB:Q9QZ88}. Early endosome Late endosome

Tissue Location
Ubiquitous. Highly expressed in heart, lung, placenta, spleen, peripheral blood leukocytes, thymus, colon skeletal muscle, kidney and brain

VPS29 Antibody (Internal) - 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

VPS29 Antibody (Internal) - Images

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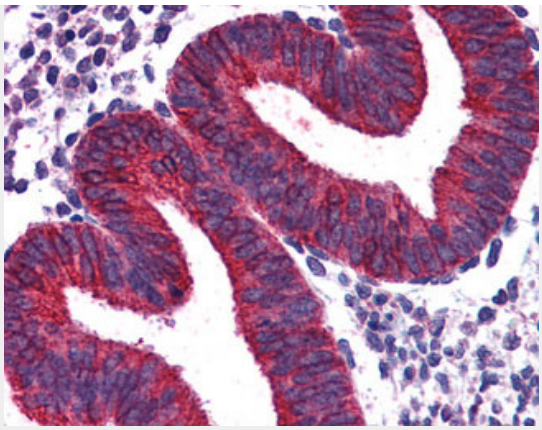

Anti-VPS29 antibody IHC of human uterus.

VPS29 Antibody (Internal) - 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 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. Required to regulate transcytosis of the polymeric immunoglobulin receptor (pIgR-pIgA) (Probable). Involved in GLUT1 endosome-to-plasma membrane trafficking; the function is dependent of association with ANKRD27 (PubMed:24856514).

VPS29 Antibody (Internal) - References

Edgar A.J.,et al.Biochem. Biophys. Res. Commun. 277:622-630(2000).
Renfrew Haft C.,et al.Mol. Biol. Cell 11:4105-4116(2000).
Huang C.,et al.Submitted (NOV-1999) to the EMBL/GenBank/DDBJ databases.
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Wiemann S.,et al.Genome Res. 11:422-435(2001).