

VPS29 (Internal) Antibody (internal region)

Peptide-affinity purified goat antibody Catalog # AF2528a

Specification

VPS29 (Internal) Antibody (internal region) - Product Information

Application IHC, E
Primary Accession O9UBO0

Other Accession NP 057310.1, NP 476528.1, 51699, 56433

(mouse), 288666 (rat)

Reactivity Human

Predicted Mouse, Rat, Dog

Host Goat
Clonality Polyclonal
Concentration 0.5 mg/ml
Isotype IgG
Calculated MW 20506

VPS29 (Internal) Antibody (internal region) - Additional Information

Gene ID 51699

Other Names

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

Dilution

IHC~~1:100~500

E~~N/A

Format

0.5 mg/ml in Tris saline, 0.02% sodium azide, pH7.3 with 0.5% bovine serum albumin

Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions

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

VPS29 (Internal) Antibody (internal region) - Protein Information

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

Function

Component of the commander complex that is essential for endosomal recycling of



transmembrane cargos; the commander complex is composed of the CCC subcomplex and the retriever subcomplex (PubMed:37172566, PubMed:39587083, PubMed:38062209, PubMed:38459129). Component of the retriever complex, which 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, PubMed:37172566, PubMed:39587083, PubMed:38062209, PubMed:38459129). 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 SNX27retromer 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 (plgR-plgA) (PubMed:15247922, PubMed:21725319, PubMed:23563491). 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

target="_blank">39587083). 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).

target=" blank">28892079, PubMed:<a href="http://www.uniprot.org/citations/39587083"

supply and cell signaling (PubMed: <a href="http://www.uniprot.org/citations/28892079"

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 (Internal) Antibody (internal region) - Protocols

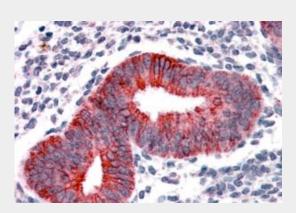
Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides



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

VPS29 (Internal) Antibody (internal region) - Images



AF2528a (3.8 μ g/ml) staining of paraffin embedded Human Uterus. Steamed antigen retrieval with citrate buffer pH 6, AP-staining.

VPS29 (Internal) Antibody (internal region) - Background

This antibody is expected to recognise both reported isoforms (NP_057310.1 and NP_476528.1).

VPS29 (Internal) Antibody (internal region) - References

A retromerlike complex is a novel Rab7 effector that is involved in the transport of the virulence factor cysteine protease in the enteric protozoan parasite Entamoeba histolytica. Nakada-Tsukui K, Saito-Nakano Y, Ali V, Nozaki T. Mol Biol Cell. 2005 Nov;16(11):5294-303. Epub 2005 Aug 24. PMID: 16120649