

Goat Anti-VPS26A Antibody
Peptide-affinity purified goat antibody
Catalog # AF2150a

Specification

Goat Anti-VPS26A Antibody - Product Information

Application	WB
Primary Accession	O75436
Other Accession	NP_004887 , 9559 , 30930 (mouse)
Reactivity	Human
Predicted	Mouse, Rat, Pig
Host	Goat
Clonality	Polyclonal
Concentration	100ug/200ul
Isotype	IgG
Calculated MW	38170

Goat Anti-VPS26A Antibody - Additional Information

Gene ID 9559

Other Names

Vacuolar protein sorting-associated protein 26A, Vesicle protein sorting 26A, hVPS26, VPS26A, VPS26

Format

0.5 mg IgG/ml in Tris saline (20mM Tris pH7.3, 150mM NaCl), 0.02% sodium azide, 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

Goat Anti-VPS26A Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Goat Anti-VPS26A Antibody - Protein Information

Name VPS26A {ECO:0000303|PubMed:30213940, ECO:0000312|HGNC:HGNC:12711}

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 (Probable). 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 (PubMed:15078902, PubMed:15078903). Required to regulate transcytosis of the polymeric immunoglobulin receptor (pIgR-pIgA) (PubMed:15247922). Required for the endosomal localization of WASHC2A (indicative for the WASH complex) (PubMed:22070227). Required for the endosomal localization of TBC1D5 (PubMed:20923837). Mediates retromer cargo recognition of SORL1 and is involved in trafficking of SORL1 implicated in sorting and processing of APP (PubMed:22279231). Involved in retromer-independent lysosomal sorting of F2R (PubMed:16407403). Involved in recycling of ADRB2 (PubMed:21602791). Enhances the affinity of SNX27 for PDZ-binding motifs in cargo proteins (By similarity).

Cellular Location

Cytoplasm. Endosome membrane; Peripheral membrane protein {ECO:0000250|UniProtKB:P40336}. Early endosome Note=Localizes to tubular profiles adjacent to endosomes (PubMed:15078903). Predominantly found in early not late endosomes (By similarity). {ECO:0000250|UniProtKB:P40336}

Goat Anti-VPS26A Antibody - Protocols

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

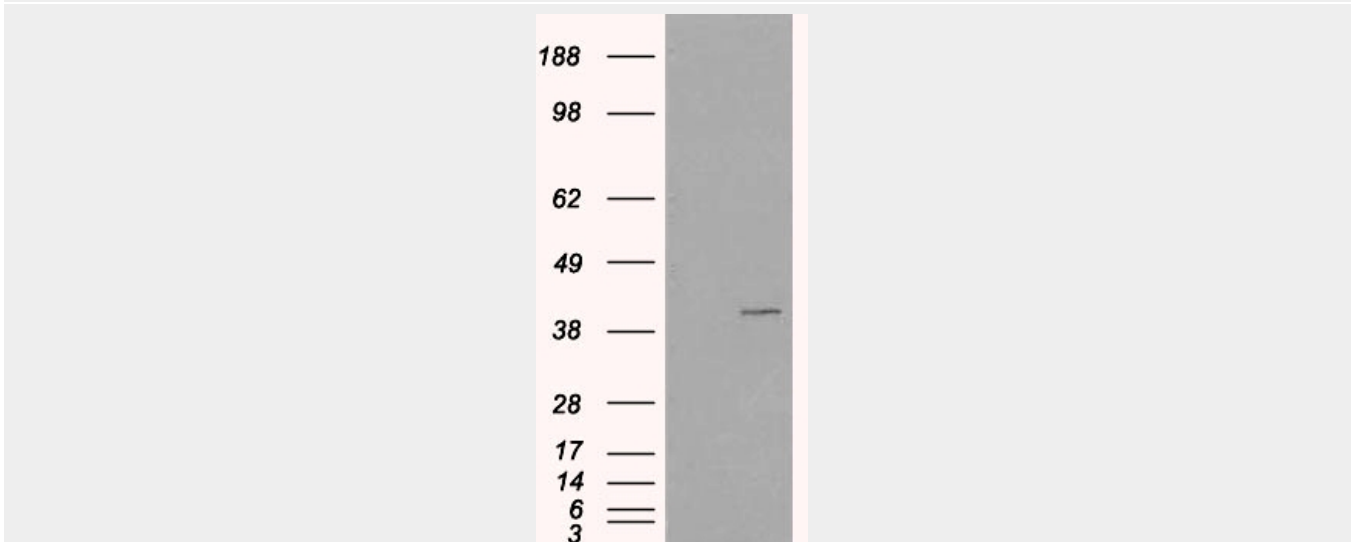
- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

Goat Anti-VPS26A Antibody - Images





AF2150a staining (1 µg/ml) of Human Kidney lysate (RIPA buffer, 35 µg total protein per lane). Primary incubated for 1 hour. Detected by western blot using chemiluminescence.



HEK293 overexpressing VPS26A (RC205353) and probed with AF2150a (mock transfection in first lane), tested by Origene.

Goat Anti-VPS26A Antibody - Background

This gene belongs to a group of vacuolar protein sorting (VPS) genes. The encoded protein is a component of a large multimeric complex, termed the retromer complex, involved in retrograde transport of proteins from endosomes to the trans-Golgi network. The close structural similarity between the yeast and human proteins that make up this complex suggests a similarity in function. Expression studies in yeast and mammalian cells indicate that this protein interacts directly with VPS35, which serves as the core of the retromer complex. Alternative splicing results in multiple transcript variants encoding different isoforms.

Goat Anti-VPS26A Antibody - References

Membrane recruitment of the cargo-selective retromer subcomplex is catalysed by the small GTPase Rab7 and inhibited by the Rab-GAP TBC1D5. Seaman MN, et al. *J Cell Sci*, 2009 Jul 15. PMID 19531583.

Interchangeable but essential functions of SNX1 and SNX2 in the association of retromer with

endosomes and the trafficking of mannose 6-phosphate receptors. Rojas R, et al. Mol Cell Biol, 2007 Feb. PMID 17101778.

No association of vacuolar protein sorting 26 polymorphisms with Alzheimer's disease.

Riemenschneider M, et al. Neurobiol Aging, 2007 Jun. PMID 16784798.

The retromer subunit Vps26 has an arrestin fold and binds Vps35 through its C-terminal domain. Shi H, et al. Nat Struct Mol Biol, 2006 Jun. PMID 16732284.

An essential role for SNX1 in lysosomal sorting of protease-activated receptor-1: evidence for retromer-, Hrs-, and Tsg101-independent functions of sorting nexins. Gullapalli A, et al. Mol Biol Cell, 2006 Mar. PMID 16407403.