

VPS41 Antibody (internal region)

Peptide-affinity purified goat antibody Catalog # AF2445a

Specification

VPS41 Antibody (internal region) - Product Information

Application IHC, E Primary Accession P49754

Other Accession <u>NP_055211.2</u>, <u>NP_542198.2</u>, <u>27072</u>

Reactivity Human

Predicted Mouse, Rat, Dog

Host Goat
Clonality Polyclonal
Concentration 0.5 mg/ml
Isotype IgG
Calculated MW 98566

VPS41 Antibody (internal region) - Additional Information

Gene ID 27072

Other Names

Vacuolar protein sorting-associated protein 41 homolog, S53, VPS41

Dilution

IHC~~1:100~500

 $E \sim N/A$

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

VPS41 Antibody (internal region) is for research use only and not for use in diagnostic or therapeutic procedures.

VPS41 Antibody (internal region) - Protein Information

Name VPS41

Function

Plays a role in vesicle-mediated protein trafficking to lysosomal compartments including the endocytic membrane transport and autophagic pathways. Acts as a component of the HOPS endosomal tethering complex. This complex is proposed to be involved in the Rab5- to-Rab7



endosome conversion probably implicating MON1A/B, and via binding SNAREs and SNARE complexes to mediate tethering and docking events during SNARE-mediated membrane fusion. The HOPS complex is proposed to be recruited to Rab7 on the late endosomal membrane and to regulate late endocytic, phagocytic and autophagic traffic towards lysosomes (PubMed:23351085, PubMed:33851776). Involved in homotypic vesicle fusions between late endosomes and in heterotypic fusions between late endosomes and lysosomes implicated in degradation of endocytosed cargo (PubMed:23167963, PubMed:25445562, PubMed:25908847, PubMed:9159129, PubMed:25783203, PubMed:25783203, PubMed:<a href="http:

href="http://www.uniprot.org/citations/25783203" target="_blank">25783203, PubMed:37821429). Links the HOPS complex to endosomal Rab7 via its association with RILP and to lysosomal membranes via its association with ARL8B, suggesting that these interactions may bring the compartments to close proximity for fusion (PubMed:21802320, PubMed:25445562, PubMed:25908847). Involved in the direct trans-Golgi network to late endosomes transport of lysosomal membrane proteins independently of HOPS (PubMed:23322049). Involved in sorting to the regulated secretory pathway presumably implicating the AP-3 adapter complex (By similarity). May play a role in HOPS-independent function in the regulated secretory pathway (PubMed:24210660/a>).

Cellular Location

Endosome membrane; Peripheral membrane protein. Late endosome membrane; Peripheral membrane protein. Early endosome membrane; Peripheral membrane protein. Lysosome membrane; Peripheral membrane protein. Golgi apparatus, trans- Golgi network. Cytoplasmic vesicle, clathrin-coated vesicle. Cytoplasm, cytosol

Tissue Location

Expressed in cerebral cortex and cerebellum. Highly expressed in Purkinje cells.

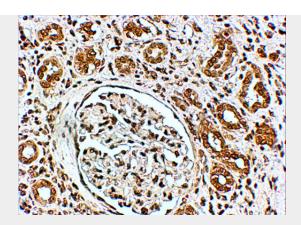
VPS41 Antibody (internal region) - Protocols

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

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

VPS41 Antibody (internal region) - Images





AF2445a (4 μ g/ml) staining of paraffin embedded Human Kidney. Steamed antigen retrieval with citrate buffer pH 6, HRP-staining. Similar results were obtained after antigen retrieval at pH9.

VPS41 Antibody (internal region) - Background

This antibody is expected to recognise both reported isoforms (NP_055211.2 and NP_542198.2)

VPS41 Antibody (internal region) - References

hVPS41 is expressed in multiple isoforms and can associate with vesicles through a RING-H2 finger motif. McVey Ward D, Radisky D, Scullion MA, Tuttle MS, Vaughn M, Kaplan J. Exp Cell Res. 2001 Jul 1;267(1):126-34. PMID: 11412045