

VPS16 (isoform 1) Antibody (internal region)

Peptide-affinity purified goat antibody Catalog # AF4117a

Specification

VPS16 (isoform 1) Antibody (internal region) - Product Information

Application WB, E
Primary Accession O9H269

Other Accession <u>NP_072097.2</u>, <u>64601</u>, <u>80743 (mouse)</u>, <u>296159</u>

<u>(rat)</u>

Reactivity Human, Mouse, Rat

Predicted Pig, Dog
Host Goat
Clonality Polyclonal
Concentration 0.5 mg/ml
Isotype IgG
Calculated MW 94694

VPS16 (isoform 1) Antibody (internal region) - Additional Information

Gene ID 64601

Other Names

Vacuolar protein sorting-associated protein 16 homolog, hVPS16, VPS16

Dilution

WB~~1:1000 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

VPS16 (isoform 1) Antibody (internal region) is for research use only and not for use in diagnostic or therapeutic procedures.

VPS16 (isoform 1) Antibody (internal region) - Protein Information

Name VPS16

Function

Plays a role in vesicle-mediated protein trafficking to lysosomal compartments including the endocytic membrane transport and autophagic pathways. Believed to act as a core component of



the putative HOPS and CORVET endosomal tethering complexes which are 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. The CORVET complex is proposed to function as a Rab5 effector to mediate early endosome fusion probably in specific endosome subpopulations (PubMed:11382755, PubMed:23351085, PubMed:24554770, PubMed:25266290, PubMed:25783203, PubMed:25783203, Required for recruitment of VPS33A to the HOPS complex (PubMed:23901104, Required for

fusion of endosomes and autophagosomes with lysosomes; the function is dependent on its association with VPS33A but not VPS33B (PubMed:25783203). The function

href="http://www.uniprot.org/citations/25783203" target="_blank">25783203). The function in autophagosome- lysosome fusion implicates STX17 but not UVRAG (PubMed:24554770).

Cellular Location

Late endosome membrane; Peripheral membrane protein; Cytoplasmic side. Lysosome membrane; Peripheral membrane protein; Cytoplasmic side. Early endosome. Cytoplasmic vesicle, clathrin-coated vesicle {ECO:0000250|UniProtKB:Q920Q4}. Cytoplasmic vesicle, autophagosome. Note=Colocalizes with AP- 3, clathrin, Rab5 and Rab7b (By similarity). Cytoplasmic, peripheral membrane protein associated with early endosomes and late endosomes/lysosomes. {ECO:0000250|UniProtKB:Q920Q4, ECO:0000305}

Tissue Location Ubiquitous.

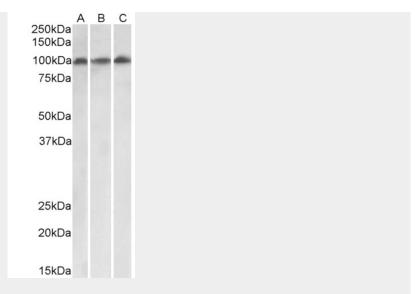
VPS16 (isoform 1) Antibody (internal region) - Protocols

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

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

VPS16 (isoform 1) Antibody (internal region) - Images





AF4117a (0.1 μ g/ml) staining of HeLa (A), HepG2 (B) and Jurkat (C) lysates (35 μ g protein in RIPA buffer). Primary incubation was 1 hour. Detected by chemiluminescence.



AF4117a (0.1 μ g/ml) staining of Mouse Spleen lysate (35 μ g protein in RIPA buffer). Primary incubation was 1 hour. Detected by chemiluminescence.

VPS16 (isoform 1) Antibody (internal region) - Background

This antibody is expected to recognize reported isoform 1 (NP_072097.2) only.

VPS16 (isoform 1) Antibody (internal region) - References

Molecular cloning and characterization of human VPS18, VPS 11, VPS16, and VPS33. Huizing M, Didier A, Walenta J, Anikster Y, Gahl WA, Krämer H. Gene. 2001 Feb 21;264(2):241-7. PMID: 11250079