

VPS41 antibody - middle region

Rabbit Polyclonal Antibody Catalog # AI12227

Product Information

Application	WB
Primary Accession	<u>P49754</u>
Other Accession	<u>NM_080631</u> , <u>NP_542198</u>
Reactivity	Human, Mouse, Rat, Rabbit, Dog, Guinea Pig, Horse, Bovine
Predicted	Human, Mouse, Rat, Rabbit, Pig, Chicken, Dog, Guinea Pig, Horse, Bovine
Host	Rabbit
Clonality	Polyclonal
Calculated MW	98566
Reactivity Predicted Host Clonality	Human, Mouse, Rat, Rabbit, Dog, Guinea Pig, Horse, Bovine Human, Mouse, Rat, Rabbit, Pig, Chicken, Dog, Guinea Pig, Horse, Bovine Rabbit Polyclonal

Additional Information

Gene ID	27072
Alias Symbol Other Names	HVPS41, HVSP41, hVps41p Vacuolar protein sorting-associated protein 41 homolog, S53, VPS41
Format	Liquid. Purified antibody supplied in 1x PBS buffer with 0.09% (w/v) sodium azide and 2% sucrose.
Reconstitution & Storage	Add 50 ul of distilled water. Final anti-VPS41 antibody concentration is 1 mg/ml in PBS buffer with 2% sucrose. For longer periods of storage, store at 20°C. Avoid repeat freeze-thaw cycles.
Precautions	VPS41 antibody - middle region is for research use only and not for use in diagnostic or therapeutic procedures.

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). Required for fusion of autophagosomes with lysosomes (PubMed: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).
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.

Images



WB Suggested Anti-VPS41 Antibody Titration: 0.2-1 $\mu g/ml$ ELISA Titer: 1:62500 Positive Control: HepG2 cell lysate

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.