

VPS18 Polyclonal Antibody

Purified Rabbit Polyclonal Antibody (Pab)

Catalog # AP57571

Product Information

Application	IHC-P, IHC-F, IF, E
Primary Accession	Q9P253
Reactivity	Rat, Pig, Dog, Bovine
Host	Rabbit
Clonality	Polyclonal
Calculated MW	110186
Physical State	Liquid
Immunogen	KLH conjugated synthetic peptide derived from human VPS18
Epitope Specificity	701-800/973
Isotype	IgG
Purity	affinity purified by Protein A
Buffer	0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.
SUBCELLULAR LOCATION	Late endosome membrane; Peripheral membrane protein; Cytoplasmic side. Lysosome membrane; Peripheral membrane protein; Cytoplasmic side. Note=Cytoplasmic, peripheral membrane protein associated with late endosomes/lysosomes.
SIMILARITY	Belongs to the VPS18 family.Contains 1 clathrin repeat.Contains 1 RING-type zinc finger.
SUBUNIT	Interacts with HOOK1. Part of a large heterooligomeric complex together with VPS11, VPS16 and VPS33A. Interacts with STX7.
Important Note	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
Background Descriptions	Vesicle mediated protein sorting plays an important role in segregation of intracellular molecules into distinct organelles. Genetic studies in yeast have identified more than 40 vacuolar protein sorting (VPS) genes involved in vesicle transport to vacuoles. This gene encodes the human homolog of yeast class C Vps18 protein. The mammalian class C Vps proteins are predominantly associated with late endosomes/lysosomes, and like their yeast counterparts, may mediate vesicle trafficking steps in the endosome/lysosome pathway.

Additional Information

Gene ID	57617
Other Names	Vacuolar protein sorting-associated protein 18 homolog, hVPS18, VPS18, KIAA1475
Target/Specificity	Ubiquitous. Expression was highest in heart and low in lung.
Dilution	IHC-P=1:100-500,IHC-F=1:100-500,IF=1:100-500,ELISA=1:5000-10000

Format	0.01M TBS(pH7.4) with 1% BSA, 0.09% (W/V) sodium azide and 50% Glyce
Storage	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.

Protein Information

Name	VPS18 (HGNC:15972)
Synonyms	KIAA1475
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: 25783203). Required for fusion of endosomes and autophagosomes with lysosomes (PubMed: 25783203). Involved in dendrite development of Pukinje cells (By similarity).
Cellular Location	Late endosome membrane; Peripheral membrane protein; Cytoplasmic side. Lysosome membrane; Peripheral membrane protein; Cytoplasmic side. Early endosome Cytoplasmic vesicle, autophagosome. Cytoplasmic vesicle, clathrin-coated vesicle. Note=Cytoplasmic, peripheral membrane protein associated with early endosomes and late endosomes/lysosomes
Tissue Location	Ubiquitous. Expression was highest in heart and low in lung.

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