

VAC14 Rabbit pAb

Catalog # AP99814

Product Information

Application	IHC-P, IHC-F, IF
Primary Accession	Q08AM6
Other Accession	Q08AM6
Host	Rabbit
Clonality	Polyclonal
Calculated MW	87973
Physical State	Liquid
Immunogen	KLH conjugated synthetic peptide derived from human VAC14
Epitope Specificity	1-100/782
Isotype	IgG
Purity	affinity purified by Protein A
Buffer	0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.
SIMILARITY	Belongs to the VAC14 family. Contains 6 HEAT repeats.
Important Note	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
Background Descriptions	The content of phosphatidylinositol 3,5-bisphosphate (PtdIns(3,5)P2) in endosomal membranes changes dynamically with fission and fusion events that generate or absorb intracellular transport vesicles. VAC14 is a component of a trimolecular complex that tightly regulates the level of PtdIns(3,5)P2. Other components of this complex are the PtdIns(3,5)P2-synthesizing enzyme PIKFYVE (MIM 609414) and the PtdIns(3,5)P2 phosphatase FIG4 (MIM 609390). VAC14 functions as an activator of PIKFYVE (Sbrissa et al., 2007 [PubMed 17556371]).[supplied by OMIM, Feb 2010]

Additional Information

Gene ID	55697
Other Names	ArPIKfyve; TAX1BP2; TRX; D8Wsu151e; ingls; VAC14_HUMAN; VAC14; Tax1-binding protein 2; VAC14_MOUSE; VAC14_RAT; VAC14 component of PIKFYVE complex; Tax1 (human T-cell leukemia virus type I) binding protein 2; Vac14 homolog (S. cerevisiae); Vac14, PIKFYVE complex component
Dilution	IHC-P=1:100-500,IHC-F=1:100-500,IF=1:100-500
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	VAC14
Synonyms	TAX1BP2, TRX
Function	Scaffold protein component of the PI(3,5)P2 regulatory complex which regulates both the synthesis and turnover of phosphatidylinositol 3,5-bisphosphate (PtdIns(3,5)P2). Pentamerizes into a star-shaped structure and nucleates the assembly of the complex. The pentamer binds a single copy each of PIKFYVE and FIG4 and coordinates both PIKfyve kinase activity and FIG4 phosphatase activity, being required to maintain normal levels of phosphatidylinositol 3- phosphate (PtdIns(3)P) and phosphatidylinositol 5-phosphate (PtdIns(5)P) (PubMed: 33098764). Plays a role in the biogenesis of endosome carrier vesicles (ECV) / multivesicular bodies (MVB) transport intermediates from early endosomes.
Cellular Location	Endosome membrane. Microsome membrane {ECO:0000250 UniProtKB:Q80W92}. Note=Mainly associated with membranes of the late endocytic pathway
Tissue Location	Ubiquitously expressed.

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