

VAC14 Antibody (N-Term)

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP21773a

Product Information

Application	WB, IHC-P, E
Primary Accession	<u>Q08AM6</u>
Reactivity	Human, Rat, Mouse
Host	Rabbit
Clonality	polyclonal
Isotype	Rabbit IgG
Clone Names	RB53572
Calculated MW	87973

Additional Information

Gene ID	55697
Other Names	Protein VAC14 homolog, Tax1-binding protein 2, VAC14, TAX1BP2, TRX
Target/Specificity	This VAC14 antibody is generated from a rabbit immunized with a KLH conjugated synthetic peptide between 125-159 amino acids from human VAC14.
Dilution	WB~~1:2000 IHC-P~~1:100~500 E~~Use at an assay dependent concentration.
Format	Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.
Storage	Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Precautions	VAC14 Antibody (N-Term) is for research use only and not for use in diagnostic or therapeutic procedures.

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: <u>33098764</u>). 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.

Background

The PI(3,5)P2 regulatory complex regulates both the synthesis and turnover of phosphatidylinositol 3,5-bisphosphate (PtdIns(3,5)P2). Acts as a positive activator of PIKfyve kinase activity. Also required to maintain normal levels of phosphatidylinositol 3-phosphate (PtdIns(3)P) and phosphatidylinositol 5-phosphate (PtdIns(5)P). Plays a role in the biogenesis of endosome carrier vesicles (ECV) / multivesicular bodies (MVB) transport intermediates from early endosomes.

References

Ota T.,et al.Nat. Genet. 36:40-45(2004). Martin J.,et al.Nature 432:988-994(2004). Mireskandari A.,et al.Biochim. Biophys. Acta 1306:9-13(1996). Ebert L.,et al.Submitted (JUN-2004) to the EMBL/GenBank/DDBJ databases. Sbrissa D.,et al.Mol. Cell. Biol. 24:10437-10447(2004).

Images



Anti-VAC14 Antibody (N-Term) at 1:2000 dilution + human spleen lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 88 kDa Blocking/Dilution buffer: 5% NFDM/TBST.

AP21773a staining VAC14 in human kidney tissue sections by Immunohistochemistry (IHC-P -

paraformaldehyde-fixed, paraffin-embedded sections). Tissue was fixed with formaldehyde and blocked with 3% BSA for 0. 5 hour at room temperature; antigen retrieval was by heat mediation with a citrate buffer (pH6). Samples were incubated with primary antibody (1/25) for 1 hours at 37°C. A undiluted biotinylated goat polyvalent antibody was used as the secondary antibody. Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.