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VAC14 Rabbit pAb

Catalog # AP99814

Product Information

Application	IHC-P, IHC-F, IF
Primary Accession	Q08AM6
Other Accession	Q08AM6
Reactivity	Mouse
Predicted	Rat, Pig, Human, Rabbit, Zebrafish, Chicken, Dog, Horse
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'.