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TM55B Antibody (C-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP13171b

Product Information

Application	WB, IHC-P, FC, E
Primary Accession	Q86T03
Other Accession	Q5PPM8, Q3TWL2, Q4R6W2, NP_001094284.1, NP_653169.2
Reactivity	Human
Predicted	Mouse, Rat, Monkey
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB32746
Calculated MW	29470
Antigen Region	183-211

Additional Information

Gene ID	90809
Other Names	Type 1 phosphatidylinositol 4, 5-bisphosphate 4-phosphatase, Type 1 PtdIns-4, 5-P2 4-Ptase, PtdIns-4, 5-P2 4-Ptase I, Transmembrane protein 55B, TMEM55B, C14orf9
Target/Specificity	This TM55B antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 183-211 amino acids from the C-terminal region of human TM55B.
Dilution	WB~~1:1000 IHC-P~~1:100~500 FC~~1:10~50 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	TM55B Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	PIP4P1 (HGNC:19299)

Function	Catalyzes the hydrolysis of phosphatidylinositol-4,5- bisphosphate (PtdIns-4,5-P2) to phosphatidylinositol-4-phosphate (PtdIns-4-P) (PubMed:16365287). Does not hydrolyze phosphatidylinositol 3,4,5-trisphosphate, phosphatidylinositol 3,4-bisphosphate, inositol 3,5-bisphosphate, inositol 3,4-bisphosphate, phosphatidylinositol 5-monophosphate, phosphatidylinositol 4-monophosphate and phosphatidylinositol 3-monophosphate (PubMed:16365287). Regulates lysosomal positioning by recruiting JIP4 to lysosomal membranes, thus inducing retrograde transport of lysosomes along microtubules (PubMed:29146937). Contributes to assembly of the V-ATPase complex in lipid rafts of the lysosomal membrane and to subsequent amino acid- dependent activation of mTORC1 (PubMed:29644770). May play a role in the regulation of cellular cholesterol metabolism (PubMed:25035345).
Cellular Location	Late endosome membrane; Multi-pass membrane protein. Lysosome membrane; Multi- pass membrane protein. Cytoplasmic vesicle, phagosome membrane {ECO:0000250|UniProtKB:Q3TWL2}; Multi-pass membrane protein. Cell membrane {ECO:0000250|UniProtKB:Q3TWL2}; Multi-pass membrane protein
Tissue Location	Ubiquitous..

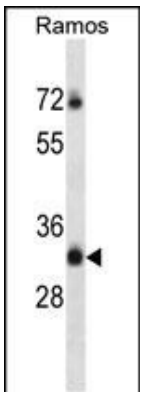
Background

TMEM55B catalyzes the degradation of phosphatidylinositol 4,5-bisphosphate (PtdIns-4,5-P2) by removing the 4-phosphate (Ungewickell et al., 2005 [PubMed 16365287]).

References

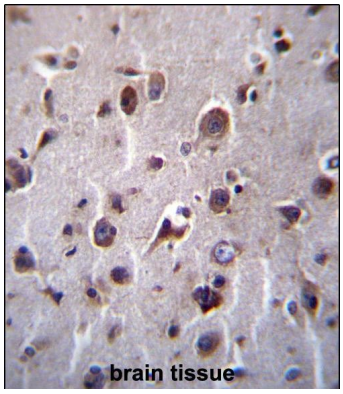
Zou, J., et al. Proc. Natl. Acad. Sci. U.S.A. 104(43):16834-16839(2007)
Ungewickell, A., et al. Proc. Natl. Acad. Sci. U.S.A. 102(52):18854-18859(2005)

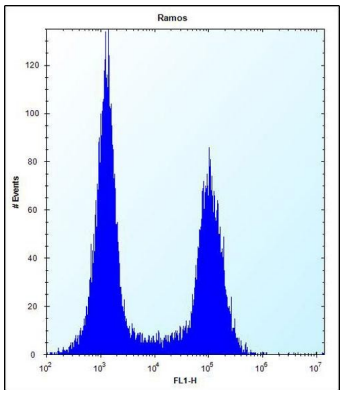
Images



TM55B Antibody (C-term) (Cat. #AP13171b) western blot analysis in Ramos cell line lysates (35ug/lane).This demonstrates the TM55B antibody detected the TM55B protein (arrow).

TM55B Antibody (C-term) (Cat. #AP13171b)immunohistochemistry analysis in formalin fixed and paraffin embedded human brain tissue followed by peroxidase conjugation of the secondary antibody and DAB staining.This data demonstrates the use of TM55B Antibody (C-term) for immunohistochemistry. Clinical relevance has not been evaluated.





TM55B Antibody (C-term) (Cat. #AP13171b) flow cytometric analysis of Ramos cells (right histogram) compared to a negative control cell (left histogram).FITC-conjugated donkey-anti-rabbit secondary antibodies were used for the analysis.