

**TM55B Antibody (C-term)**  
**Affinity Purified Rabbit Polyclonal Antibody (Pab)**  
**Catalog # AP13171b**

**Specification**

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**TM55B Antibody (C-term) - Product Information**

Application	WB, IHC-P, FC,E
Primary Accession	<a href="#">Q86T03</a>
Other Accession	<a href="#">Q5PPM8</a> , <a href="#">Q3TWL2</a> , <a href="#">Q4R6W2</a> , <a href="#">NP_001094284.1</a> , <a href="#">NP_653169.2</a>
Reactivity	Human
Predicted	Monkey, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Calculated MW	29470
Antigen Region	183-211

**TM55B Antibody (C-term) - 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~~1:10~50  
FC~~1:10~50

**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.

**TM55B Antibody (C-term) - 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

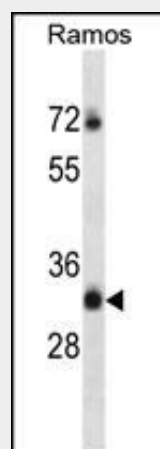
**Tissue Location**

Ubiquitous..

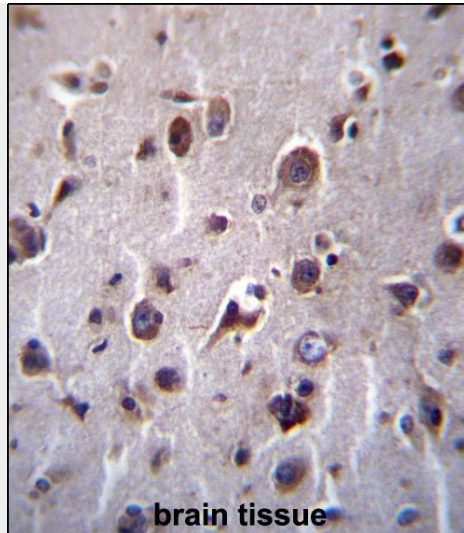
**TM55B Antibody (C-term) - Protocols**

Provided below are standard protocols that you may find useful for product applications.

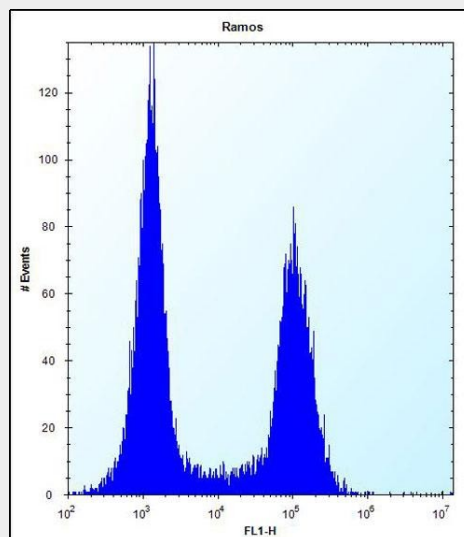
- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

**TM55B Antibody (C-term) - 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.

### **TM55B Antibody (C-term) - Background**

TMEM55B catalyzes the degradation of phosphatidylinositol 4,5-bisphosphate (PtdIns-4,5-P<sub>2</sub>) by removing the 4-phosphate (Ungewickell et al., 2005 [PubMed 16365287]).

### **TM55B Antibody (C-term) - 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)