

TM55B Antibody (C-term) Blocking Peptide
Synthetic peptide
Catalog # BP13171b**Specification**

TM55B Antibody (C-term) Blocking Peptide - Product InformationPrimary Accession [Q86T03](#)**TM55B Antibody (C-term) Blocking Peptide - 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

The synthetic peptide sequence used to generate the antibody AP13171b was selected from the C-term region of TM55B. A 10 to 100 fold molar excess to antibody is recommended. Precise conditions should be optimized for a particular assay.

Format

Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

Precautions

This product is for research use only. Not for use in diagnostic or therapeutic procedures.

TM55B Antibody (C-term) Blocking Peptide - Protein InformationName 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:29146937).

href="http://www.uniprot.org/citations/29644770" target="_blank">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) Blocking Peptide - Protocols

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

- [Blocking Peptides](#)

TM55B Antibody (C-term) Blocking Peptide - Images**TM55B Antibody (C-term) Blocking Peptide - Background**

TMEM55B catalyzes the degradation of phosphatidylinositol4,5-bisphosphate (PtdIns-4,5-P2) by removing the 4-phosphate(Ungewickell et al., 2005 [PubMed 16365287]).

TM55B Antibody (C-term) Blocking Peptide - 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)