

MTMR9 Antibody

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP6808a

Specification

MTMR9 Antibody - Product Information

Application Primary Accession Other Accession Reactivity Host Clonality Isotype Antigen Region IHC-P, WB,E <u>Q96QG7</u> <u>Q96QG7</u>, <u>NP_060147</u> Human, Mouse Rabbit Polyclonal Rabbit IgG 518-549

MTMR9 Antibody - Additional Information

Gene ID 66036

Other Names Myotubularin-related protein 9, 313-, MTMR8

Target/Specificity

This MTMR8 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 518-549 amino acids from the C-terminal region of human MTMR8.

Dilution IHC-P~~1:10~50 WB~~1:1000 E~~Use at an assay dependent concentration.

Format

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is prepared by Saturated Ammonium Sulfate (SAS) precipitation followed by dialysis against PBS.

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

MTMR9 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

MTMR9 Antibody - Protein Information

Name MTMR9

Synonyms C8orf9, MTMR8



Function Acts as an adapter for myotubularin-related phosphatases (PubMed:<u>19038970</u>, PubMed:<u>22647598</u>). Increases lipid phosphatase MTMR6 catalytic activity, specifically towards phosphatidylinositol 3,5- bisphosphate and MTMR6 binding affinity for phosphorylated phosphatidylinositols (PubMed:<u>19038970</u>, PubMed:<u>22647598</u>). Positively regulates lipid phosphatase MTMR7 catalytic activity (By similarity). Increases MTMR8 catalytic activity towards phosphatidylinositol 3- phosphate (PubMed:<u>22647598</u>). The formation of the MTMR6-MTMR9 complex, stabilizes both MTMR6 and MTMR9 protein levels (PubMed:<u>19038970</u>). Stabilizes MTMR8 protein levels (PubMed:<u>22647598</u>). Plays a role in the late stages of macropinocytosis possibly by regulating MTMR6-mediated dephosphorylation of phosphatidylinositol 3-phosphate in membrane ruffles (PubMed:<u>24591580</u>). Negatively regulates autophagy, in part via its association with MTMR8 (PubMed:<u>22647598</u>). Negatively regulates DNA damage-induced apoptosis, in part via its association with MTMR6 (PubMed:<u>19038970</u>, PubMed:<u>22647598</u>). Does not bind mono-, di- and triphosphorylated phosphatidylinositols, phosphatidic acid and phosphatidylserine (PubMed:<u>19038970</u>).

Cellular Location

Cytoplasm. Cell projection, ruffle membrane {ECO:0000250|UniProtKB:Q9Z2D0}; Peripheral membrane protein; Cytoplasmic side. Cytoplasm, perinuclear region Endoplasmic reticulum. Note=Localizes to ruffles during EGF-induced macropinocytosis (By similarity) Colocalizes with MTMR6 to the perinuclear region (PubMed:19038970) Partially localizes to the endoplasmic reticulum (PubMed:19038970) {ECO:0000250|UniProtKB:Q9Z2D0, ECO:0000269|PubMed:19038970}

Tissue Location Expressed in many tissues.

MTMR9 Antibody - Protocols

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

- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

MTMR9 Antibody - Images





Anti-MTMR9 Antibody (Cat. #AP6808a) is used in Western blot to detect MTMR9 in mouse heart tissue lysate.



Anti-MTMR9 Antibody at 1:1000 dilution + K562 whole cell lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 63 kDa Blocking/Dilution buffer: 5% NFDM/TBST.





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Formalin-fixed and paraffin-embedded human hepatocarcinoma tissue reacted with MTMR9 antibody, which was peroxidase-conjugated to the secondary antibody, followed by DAB staining. This data demonstrates the use of this antibody for immunohistochemistry; clinical relevance has not been evaluated.

MTMR9 Antibody - Background

MTMR8 is a myotubularin-related protein that is atypical to most other members of the myotubularin-related protein family because it has no dual-specificity phosphatase domain. The encoded protein contains a double-helical motif similar to the SET interaction domain, which is thought to have a role in the control of cell proliferation. In mouse, a protein similar to the encoded protein binds with MTMR7, and together they dephosphorylate phosphatidylinositol 3-phosphate and inositol 1,3-bisphosphate.

MTMR9 Antibody - References

Appel, S., et al., Eur. J. Hum. Genet. 10(1):17-25 (2002). Appel, S., et al., Genomics 75 (1-3), 6-8 (2001).