

### 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

WB, IHC-P,E
O96OG7
O96OG7, NP\_060147
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**

WB~~1:1000 IHC-P~~1:10~50

### **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: 19038970,



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

#### **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.

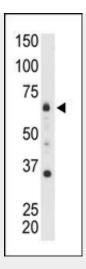
## **MTMR9 Antibody - Protocols**

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

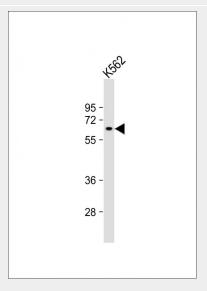
- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- <u>Immunofluorescence</u>
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

# MTMR9 Antibody - Images

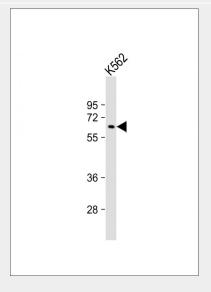




Anti-MTMR9 Antibody (Cat. #AP6808a) is used in Western blot to detect MTMR9 in mouse heart tissue lysate.

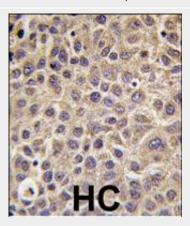


Anti-MTMR9 Antibody at 1:1000 dilution + K562 whole cell lysate Lysates/proteins at 20  $\mu$ g per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 63 kDa Blocking/Dilution buffer: 5% NFDM/TBST.





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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).