

For Research Use Only

# MTMR14 Monoclonal antibody

Catalog Number: 67561-1-Ig **2 Publications**



## Basic Information

<b>Catalog Number:</b> 67561-1-Ig	<b>GenBank Accession Number:</b> BC050626	<b>Purification Method:</b> Protein A purification
<b>Size:</b> 150ul , Concentration: 1800 µg/ml by Nanodrop and 1000 µg/ml by Bradford method using BSA as the standard;	<b>GeneID (NCBI):</b> 64419	<b>CloneNo.:</b> 1A8B2
<b>Source:</b> Mouse	<b>Full Name:</b> myotubularin related protein 14	<b>Recommended Dilutions:</b> WB 1:1000-1:6000 IHC 1:500-1:2000 IF 1:200-1:800
<b>Isotype:</b> IgG2b	<b>Calculated MW:</b> 72 kDa	
<b>Immunogen Catalog Number:</b> AG6883	<b>Observed MW:</b> 74 kDa	

## Applications

### Tested Applications:

IF, IHC, WB, ELISA

### Cited Applications:

IF, WB

### Species Specificity:

Human, mouse, rat

### Cited Species:

human, mouse, rat

**Note-IHC: suggested antigen retrieval with TE buffer pH 9.0; (\*) Alternatively, antigen retrieval may be performed with citrate buffer pH 6.0**

### Positive Controls:

WB : HeLa cells, HEK-293 cells, K-562 cells, Jurkat cells, HSC-T6 cells, NIH/3T3 cells, RAW 264.7 cells

IHC : mouse heart tissue, mouse skeletal muscle tissue

IF : mouse heart tissue,

## Background Information

MTMR14, also known as Jumpy, belongs to the MTM1/MTMRs family which has 15 members that divided into two subgroup: catalytically inactive and active. MTMR14 is a catalytically active member possessing an active phosphatase domain, that specifically dephosphorylates PI3P and phosphatidylinositol (3,5)-bisphosphate (PI3,5P2) at position 3 on inositol ring. A remarkable feature of the MTM1/MTMRs family is the association between a catalytically inactive member and a catalytically active member, which plays an important regulatory role. MTMR14 has 3 isoforms with molecular weight of 60-72 kDa, and also can be detected as a higher molecular weight due to the heterodimerization with other MTMR members.

## Notable Publications

Author	Pubmed ID	Journal	Application
Ling-Yao Kong	36314496	J Am Heart Assoc	IF
Yiya Gu	35035670	Oxid Med Cell Longev	WB

## Storage

### Storage:

Store at -20°C.

### Storage Buffer:

PBS with 0.02% sodium azide and 50% glycerol pH 7.3.

Aliquoting is unnecessary for -20°C storage

\*\*\* 20ul sizes contain 0.1% BSA

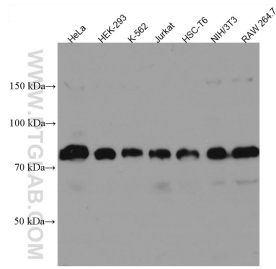
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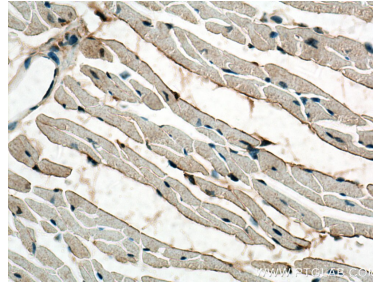
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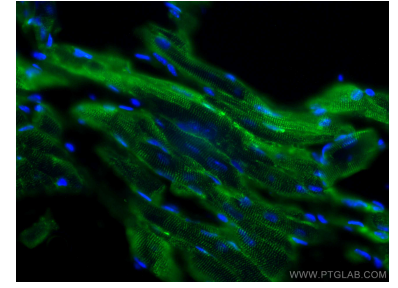
## Selected Validation Data



Various lysates were subjected to SDS PAGE followed by western blot with 67561-1-Ig (MTMR14 antibody) at dilution of 1:3000 incubated at room temperature for 1.5 hours.



Immunohistochemical analysis of paraffin-embedded mouse heart tissue slide using 67561-1-Ig (MTMR14 antibody) at dilution of 1:1000 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunofluorescent analysis of (4% PFA) fixed mouse heart tissue using MTMR14 antibody (67561-1-Ig, Clone: 1A8B2) at dilution of 1:400 and CoraLite®488-Conjugated AffiniPure Goat Anti-Mouse IgG(H+L).