

MTMR14 Monoclonal antibody

Catalog Number: 67561-1-Ig 2 Publications

Basic Information

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| Catalog Number: 67561-1-Ig | GenBank Accession Number: BC050626 | Purification Method: Protein A purification |
| Size: 1800 µg/ml | GeneID (NCBI): 64419 | CloneNo.: 1A8B2 |
| Source: Mouse | UNIPROT ID: Q8NCE2 | Recommended Dilutions: WB 1:1000-1:6000 IHC 1:500-1:2000 IF-P 1:200-1:800 |
| Isotype: IgG2b | Full Name: myotubularin related protein 14 | |
| Immunogen Catalog Number: AG6883 | Calculated MW: 72 kDa | |
| | Observed MW: 74 kDa | |

Applications

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| Tested Applications: IF-P, IHC, WB, ELISA | Positive Controls: |
| Cited Applications: WB, IF | WB : HeLa cells, HEK-293 cells, K-562 cells, Jurkat cells, HSC-T6 cells, NIH/3T3 cells, RAW 264.7 cells |
| Species Specificity: Human, mouse, rat | IHC : mouse heart tissue, mouse skeletal muscle tissue |
| Cited Species: human, mouse, rat | IF-P : mouse heart tissue, |
| Note-IHC: suggested antigen retrieval with TE buffer pH 9.0; (*) Alternatively, antigen retrieval may be performed with citrate buffer pH 6.0 | |

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.

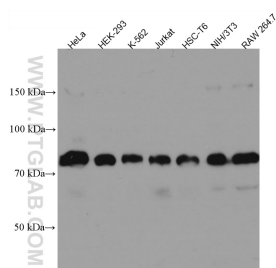
Notable Publications

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

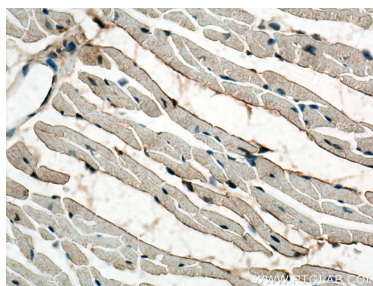
Storage

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

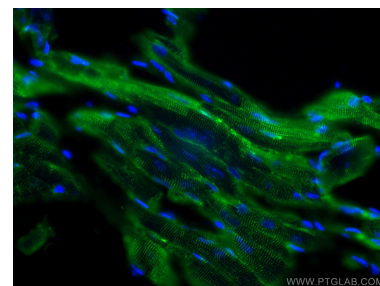
Selected Validation Data



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).