Anti-TRIM72 Antibody [A1D4]

EM1901-45

Product Type:	Mouse monoclonal IgG1, primary antibodies
Species reactivity:	Human, Mouse, Rat
Applications:	WB, IHC-P
Molecular Wt:	Predicted band size: 53 kDa
Clone number:	A1D4

Description: Muscle-specific protein that plays a central role in cell membrane repair by nucleating the assembly of the repair machinery at injury sites. Specifically binds phosphatidylserine. Acts as a sensor of oxidation: upon membrane damage, entry of extracellular oxidative environment results in disulfide bond formation and homooligomerization at the injury site. This oligomerization acts as a nucleation site for recruitment of TRIM72-containing vesicles to the injury site, leading to membrane patch formation. Probably acts upstream of the Ca2+-dependent membrane resealing process. Required for transport of DYSF to sites of cell injury during repair patch formation. Regulates membrane budding and exocytosis. May be involved in the regulation of the mobility of KCNB1-containing endocytic vesicles (By similarity).

Immunogen: Recombinant protein with Human TRIM72 aa 50-150 / 477.

Positive control: HCT 116 cell lysate, mouse skeletal muscle tissue lysate, mouse heart tissue lysate, rat heart tissue lysate, rat skeletal muscle tissue lysate, rat skeletal muscle tissue, human pancreas tissue.

Subcellular location: Sarcolemma, cytoplasmic vesicle membrane.

Database links: SwissProt: Q6ZMU5 Human | Q1XH17 Mouse | A0JPQ4 Rat

Recommended Dilutions:

WB	1:500-1:2,000
IHC-P	1:50-1:200

Storage Buffer: 1*PBS (pH7.4), 0.2% BSA, 50% Glycerol. Preservative: 0.05% Sodium Azide.

Storage Instruction: Shipped at 4℃. Store at +4℃ short term (1-2 weeks). It is recommended to aliquot into single-use upon delivery. Store at -20℃ long term.

Purity: Protein A affinity purified.

Images

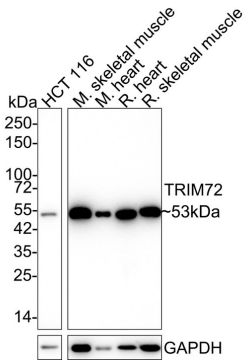

Fig1: Western blot analysis of TRIM72 on different lysates with Mouse anti-TRIM72 antibody (EM1901-45) at 1/1,000 dilution.

Lane 1: HCT 116 cell lysate (20 µg/Lane)
Lane 2: Mouse skeletal muscle tissue lysate (40 µg/Lane)
Lane 3: Mouse heart tissue lysate (40 µg/Lane)
Lane 4: Rat heart tissue lysate (40 µg/Lane)
Lane 5: Rat skeletal muscle tissue lysate (40 µg/Lane)

Predicted band size: 53 kDa
Observed band size: 53 kDa

Exposure time: 1 minute 40 seconds;

4-20% SDS-PAGE gel.

Proteins were transferred to a PVDF membrane and blocked with 5% NFDM/TBST for 1 hour at room temperature. The primary antibody (EM1901-45) at 1/1,000 dilution was used in 5% NFDM/TBST at 4℃ overnight. Goat Anti-Mouse IgG for IP Nano-Secondary Antibody (NBI02H) at 1/5,000 dilution was used for 1 hour at room temperature.

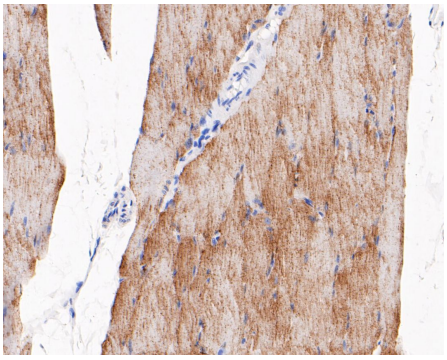

Fig2: Immunohistochemical analysis of paraffin-embedded rat skeletal muscle tissue using anti-TRIM72 antibody. The section was pre-treated using heat mediated antigen retrieval with Tris-EDTA buffer (pH 8.0-8.4) for 20 minutes.The tissues were blocked in 5% BSA for 30 minutes at room temperature, washed with ddH_2O and PBS, and then probed with the primary antibody (EM1901-45, 1/200) for 30 minutes at room temperature. The detection was performed using an HRP conjugated compact polymer system. DAB was used as the chromogen. Tissues were counterstained with hematoxylin and mounted with DPX.

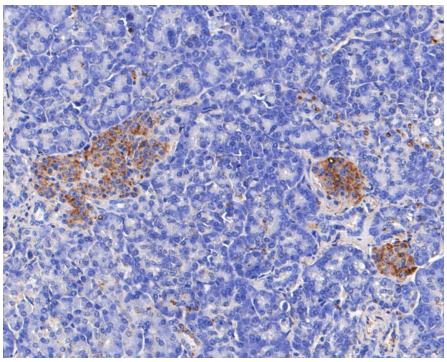

Fig3: Immunohistochemical analysis of paraffin-embedded human pancreas tissue using anti-TRIM72 antibody. The section was pre-treated using heat mediated antigen retrieval with Tris-EDTA buffer (pH 8.0-8.4) for 20 minutes.The tissues were blocked in 5% BSA for 30 minutes at room temperature, washed with ddH_2O and PBS, and then probed with the primary antibody (EM1901-45, 1/200) for 30 minutes at room temperature. The detection was performed using an HRP conjugated compact polymer system. DAB was used as the chromogen. Tissues were counterstained with hematoxylin and mounted with DPX.

Background References

1. Nagre N. et. al. TRIM72 modulates caveolar endocytosis in repair of lung cells. Am J Physiol Lung Cell Mol Physiol. 2016 Mar 1;310(5):L452-64.
2. Ishiwata-Endo H. et. al. Role of a TRIM72 ADP-ribosylation cycle in myocardial injury and membrane repair. JCI Insight. 2018 Nov 15;3(22). pii: 97898.