

TRIM72 Antibody (C-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP11980b

Specification

TRIM72 Antibody (C-term) - Product Information

Application IHC-P, WB,E Primary Accession O6ZMU5

Other Accession
Reactivity
Host
Rost
Robbit

Clonality Polyclonal Isotype Rabbit IgG Calculated MW 52731 Antigen Region 299-327

TRIM72 Antibody (C-term) - Additional Information

Gene ID 493829

Other Names

Tripartite motif-containing protein 72, Mitsugumin-53, Mg53, TRIM72 (HGNC:32671), MG53

Target/Specificity

This TRIM72 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 299-327 amino acids from the C-terminal region of human TRIM72.

Dilution

IHC-P~~1:10~50 WB~~1:2000

E~~Use at an assay dependent concentration.

Format

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

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

TRIM72 Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

TRIM72 Antibody (C-term) - Protein Information



Name TRIM72 (<u>HGNC:32671</u>)

Synonyms MG53

Function Muscle-specific E3 ubiquitin-protein ligase that plays a central role in cell membrane repair by nucleating the assembly of the repair machinery at injury sites (PubMed:36944613). Its ubiquitination activity is mediated by E2 ubiquitin-conjugating enzymes UBE2D1, UBE2D2 and UBE2D3 (By similarity). 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 (By similarity). This oligomerization acts as a nucleation site for recruitment of TRIM72-containing vesicles to the injury site, leading to membrane patch formation (By similarity). Probably acts upstream of the Ca(2+)-dependent membrane resealing process (By similarity). Required for transport of DYSF to sites of cell injury during repair patch formation (By similarity). Regulates membrane budding and exocytosis (By similarity). May be involved in the regulation of the mobility of KCNB1-containing endocytic vesicles (By similarity).

Cellular Location

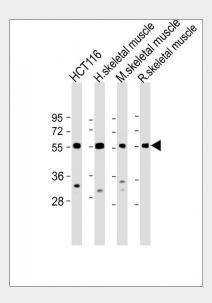
Cell membrane, sarcolemma. Cytoplasmic vesicle membrane Note=Tethered to plasma membrane and cytoplasmic vesicles via its interaction with phosphatidylserine. {ECO:0000250, ECO:0000269|PubMed:36944613, ECO:0000269|PubMed:37770719}

TRIM72 Antibody (C-term) - Protocols

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

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

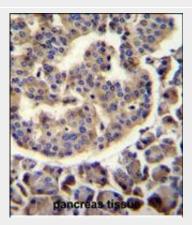
TRIM72 Antibody (C-term) - Images



All lanes: Anti-TRIM72 Antibody (C-term) at 1:2000 dilution Lane 1: HCT116 whole cell lysate



Lane 2: human skeletal muscle lysate Lane 3: mouse skeletal muscle lysate Lane 4: rat skeletal muscle lysate Lysates/proteins at 20 μ g per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 53 kDa Blocking/Dilution buffer: 5% NFDM/TBST.



TRIM72 Antibody (C-term) (Cat. #AP11980b)immunohistochemistry analysis in formalin fixed and paraffin embedded human pancreas tissue followed by peroxidase conjugation of the secondary antibody and DAB staining. This data demonstrates the use of TRIM72 Antibody (C-term) for immunohistochemistry. Clinical relevance has not been evaluated.

TRIM72 Antibody (C-term) - Background

TRIM72 is a 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 Ca(2+)-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).

TRIM72 Antibody (C-term) - References

Park, E.Y., et al. Proteins 78(3):790-795(2010) Han, S., et al. Hum. Mol. Genet. 18(6):1171-1180(2009) Martin, J., et al. Nature 432(7020):988-994(2004)