10320 Camino Santa Fe, Suite G
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MuRF1 Antibody
Purified Mouse Monoclonal Antibody
Catalog # AO1976a

Specification

MuRF1 Antibody - Product Information

Application	**E, IHC**
Primary Accession	Q969Q1
Reactivity	**Human**
Host	**Mouse**
Clonality	**Monoclonal**
Isotype	**IgG1**
Calculated MW	**40.2kDa KDa**

Description
This gene encodes a member of the RING zinc finger protein family found in striated muscle and iris. The product of this gene is an E3 ubiquitin ligase that localizes to the Z-line and M-line lattices of myofibrils. This protein plays an important role in the atrophy of skeletal and cardiac muscle and is required for the degradation of myosin heavy chain proteins, myosin light chain, myosin binding protein, and for muscle-type creatine kinase.

Immunogen
Synthesized peptide of human MuRF1 (AA: 293-304).

Formulation
Purified antibody in PBS with 0.05% sodium azide.

MuRF1 Antibody - Additional Information

Gene ID 84676

Other Names
E3 ubiquitin-protein ligase TRIM63, 6.3.2.-, Iris RING finger protein, Muscle-specific RING finger protein 1, MuRF-1, MuRF1, RING finger protein 28, Striated muscle RING zinc finger protein, Tripartite motif-containing protein 63, TRIM63, IRF, MURF1, RNF28, SMRZ

Dilution
E~~1/10000
IHC~~1/200 - 1/1000

Storage
Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions
MuRF1 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

MuRF1 Antibody - Protein Information

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Name TRIM63

Synonyms IRF, MURF1, RNF28, SMRZ

Function
E3 ubiquitin ligase. Mediates the ubiquitination and subsequent proteasomal degradation of CKM, GMEB1 and HIBADH. Regulates the proteasomal degradation of muscle proteins under amino acid starvation, where muscle protein is catabolized to provide other organs with amino acids. Inhibits de novo skeletal muscle protein synthesis under amino acid starvation. Regulates proteasomal degradation of cardiac troponin I/TNNI3 and probably of other sarcomeric-associated proteins. May play a role in striated muscle atrophy and hypertrophy by regulating an anti-hypertrophic PKC-mediated signaling pathway. May regulate the organization of myofibrils through TTN in muscle cells.

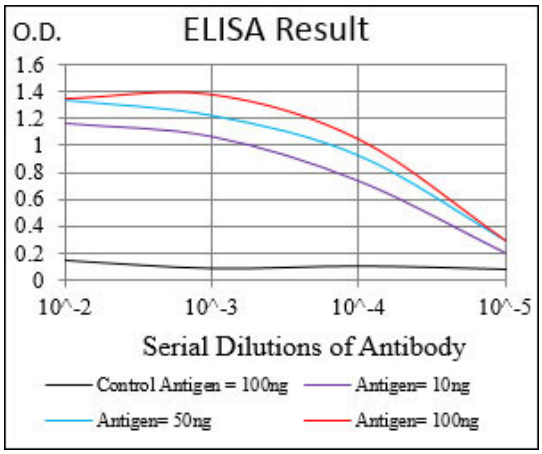
Cellular Location
Cytoplasm. Nucleus. Cytoplasm, myofibril, sarcomere, M line. Cytoplasm, myofibril, sarcomere, Z line Note=Colocalizes with TNNI3 in myocytes (By similarity). Localizes to the M- and Z-lines in skeletal muscle.

Tissue Location
Muscle specific. Selectively expressed in heart and skeletal muscle. Also expressed in the iris

MuRF1 Antibody - Protocols

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

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture



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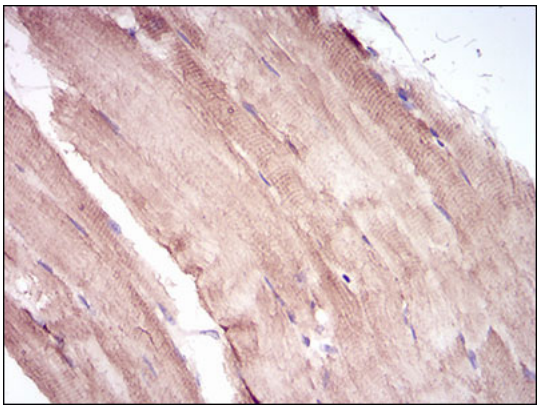


Figure 1: Immunohistochemical analysis of paraffin-embedded muscle tissues using MuRF1 mouse mAb with DAB staining.

MuRF1 Antibody - Background

DNAL4 is a component of the dynein motor complex

MuRF1 Antibody - References

1. Liver Int. 2013 May;33(5):714-21. doi: 10.1111/liv.12128. Epub 2013 Feb 24. 2. Cell Biochem Biophys. 2011 Jun;60(1-2):113-8.