

**MuRF1 Antibody**  
**Purified Mouse Monoclonal Antibody**  
**Catalog # AO1976a****Specification****MuRF1 Antibody - Product Information**

Application	IHC, E
Primary Accession	<a href="#">O96901</a>
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**

IHC~~1/200 - 1/1000

E~~1/10000

**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**

**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.

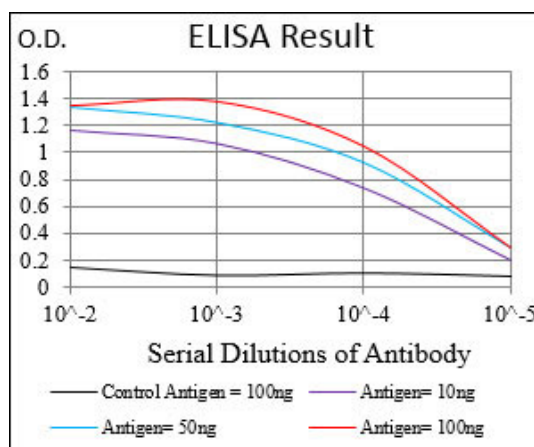
### Tissue Location

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 Cytometry](#)
- [Cell Culture](#)



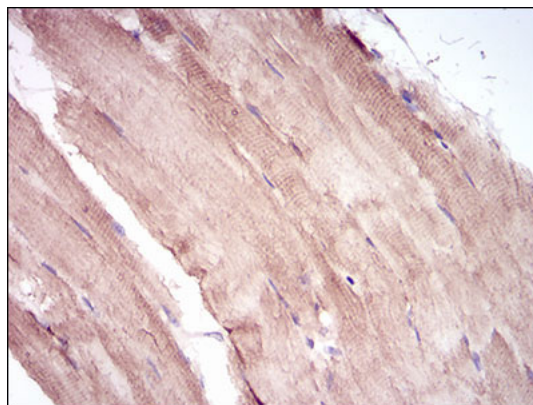


Figure 1: Immunohistochemical analysis of paraffin-embedded muscle tissues using MuRF1 mouse mAb with DAB staining.

#### **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.