

**Goat Anti-MURF1 / TRIM63 (N Term) Antibody**  
**Peptide-affinity purified goat antibody**  
**Catalog # AF1697a****Specification**

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**Goat Anti-MURF1 / TRIM63 (N Term) Antibody - Product Information**

Application	IHC
Primary Accession	<a href="#">O969Q1</a>
Other Accession	<a href="#">NP_115977</a> , <a href="#">84676</a>
Reactivity	Human
Predicted	Dog, Cow
Host	Goat
Clonality	Polyclonal
Concentration	100ug/200ul
Isotype	IgG
Calculated MW	40248

**Goat Anti-MURF1 / TRIM63 (N Term) 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

**Format**

0.5 mg IgG/ml in Tris saline (20mM Tris pH7.3, 150mM NaCl), 0.02% sodium azide, with 0.5% bovine serum albumin

**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**

Goat Anti-MURF1 / TRIM63 (N Term) Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

**Goat Anti-MURF1 / TRIM63 (N Term) 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.

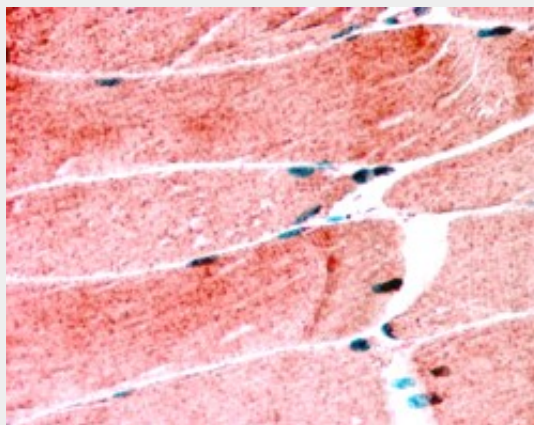
**Tissue Location**

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

**Goat Anti-MURF1 / TRIM63 (N Term) 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](#)

**Goat Anti-MURF1 / TRIM63 (N Term) Antibody - Images**

AF1697a (1.25 µg/ml) staining of paraffin embedded Human Skeletal Muscle. Steamed antigen retrieval with citrate buffer pH 6, AP-staining.

**Goat Anti-MURF1 / TRIM63 (N Term) Antibody - Background**

This gene encodes a member of the RING zinc finger protein family found in striated muscle and iris. The product of this gene is localized to the Z-line and M-line lattices of myofibrils, where titin's N-terminal and C-terminal regions respectively bind to the sarcomere. In vitro binding studies have shown that this protein also binds directly to titin near the region of titin containing kinase activity. Another member of this protein family binds to microtubules. Since these family members can form heterodimers, this suggests that these proteins may serve as a link between titin kinase and

microtubule-dependent signal pathways in muscle.

#### **Goat Anti-MURF1 / TRIM63 (N Term) Antibody - References**

Depressed expression of MuRF1 and MAFbx in areas remote of recent myocardial infarction: a mechanism contributing to myocardial remodeling? Conraads VM, et al. Basic Res Cardiol, 2010 Mar. PMID 19859778.

Atrogin-1 and MuRF1 regulate cardiac MyBP-C levels via different mechanisms. Mearini G, et al. Cardiovasc Res, 2010 Jan 15. PMID 19850579.

Atrogin-1, MuRF1, and FoXO, as well as phosphorylated GSK-3beta and 4E-BP1 are reduced in skeletal muscle of chronic spinal cord-injured patients. L ger B, et al. Muscle Nerve, 2009 Jul. PMID 19533653.

Structural analysis of B-Box 2 from MuRF1: identification of a novel self-association pattern in a RING-like fold. Mrosek M, et al. Biochemistry, 2008 Oct 7. PMID 18795805.

The glucocorticoid receptor and FOXO1 synergistically activate the skeletal muscle atrophy-associated MuRF1 gene. Waddell DS, et al. Am J Physiol Endocrinol Metab, 2008 Oct. PMID 18612045.