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Goat Anti-MURF1 / TRIM63 (N Term) Antibody

Peptide-affinity purified goat antibody
Catalog # AF1697a

Specification

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

Application	**IHC, E**
Primary Accession	Q969Q1
Other Accession	NP_115977, 84676
Reactivity	**Human**
Predicted	**Dog**
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

Dilution
IHC~~1:100~500
E~~N/A

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.

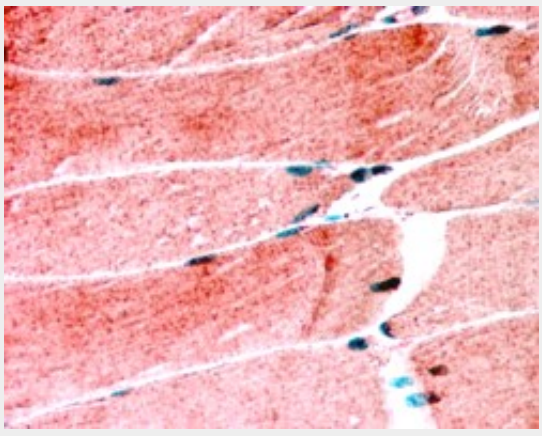
Tissue Location
Muscle specific. Selectively expressed in heart and skeletal muscle. Also expressed in the iris

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 Cytomety
- 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.
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