10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

MuRF1 Antibody

Purified Mouse Monoclonal Antibody
Catalog # AO1976a

Product Information

Application	IHC, E
Primary Accession	Q969Q1
Reactivity	Human
Host	Mouse
Clonality	Monoclonal
Clone Names	6H6D4
Isotype	IgG1
Calculated MW	40248
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.

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.

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 {ECO:0000250|UniProtKB:Q38HM4}. Cytoplasm, myofibril, sarcomere, M line. Cytoplasm, myofibril, sarcomere, Z line. Note=Colocalizes with TNNI3 in myocytes (By similarity)
Tissue Location	Muscle specific. Selectively expressed in heart and skeletal muscle. Also expressed in the iris

Background

DNAL4 is a component of the dynein motor complex

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.

Images

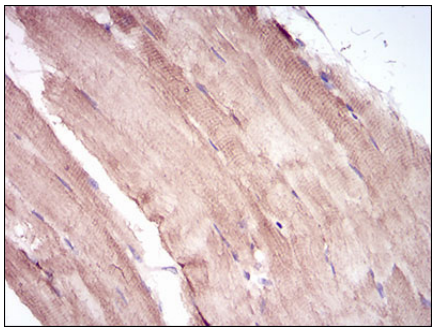


Figure 1: Immunohistochemical analysis of paraffin-embedded muscle tissues using MuRF1 mouse mAb with DAB staining.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.