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Anti-MuRF1 (C-terminal region) Antibody

Catalog # AN1841

Product Information

Application	WB
Primary Accession	Q969Q1
Host	Mouse
Clonality	Mouse Monoclonal
Isotype	IgG1
Clone Names	M316
Calculated MW	40248

Additional Information

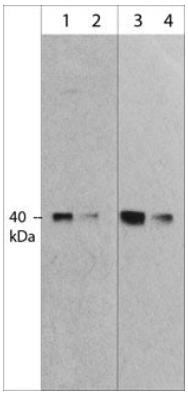
Gene ID	84676
Other Names	Tripartite motif 63, TRIM63, SMRZ, IRF, RNF28, Muscle RING finger, MURF-1
Target/Specificity	Muscle proteolysis is regulated by the ATP-dependent ubiquitin–proteasome system. This system involves ubiquitination of specific proteins, leading to recognition and degradation by the 26S proteasome complex. Ubiquitination requires interactions with ubiquitin related proteins, ubiquitin-activating (E1), ubiquitin-conjugating (E2) and ubiquitin-ligating enzymes (E3) known as ligases. Two muscle specific ubiquitin ligases have been identified, muscle ring finger 1 (MuRF-1) and Atrogin 1. Both ligases are regulated by the Akt1/FOXO1 signaling pathway, and both proteins have been shown to be upregulated prior to the onset of atrophy in multiple models of muscle wasting, including disuse and cachexia. MuRF1 is also known as TRIM63, SMRZ, and RNF28, and its expression is upregulated after TNFα treatment in C2C12 cells and muscle tissue, while localization of MuRF1 protein has been observed in the cytoplasm and nucleus of cells.
Dilution	WB~~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	Anti-MuRF1 (C-terminal region) Antibody is for research use only and not for use in diagnostic or therapeutic procedures.
Shipping	Blue Ice

Background

Muscle proteolysis is regulated by the ATP-dependent ubiquitin–proteasome system. This system involves ubiquitination of specific proteins, leading to recognition and degradation by the 26S proteasome complex. Ubiquitination requires interactions with ubiquitin related proteins, ubiquitin-activating (E1), ubiquitin-conjugating (E2) and ubiquitin-ligating enzymes (E3) known as ligases. Two muscle specific

ubiquitin ligases have been identified, muscle ring finger 1 (MuRF-1) and Atrogin 1. Both ligases are regulated by the Akt1/FOXO1 signaling pathway, and both proteins have been shown to be upregulated prior to the onset of atrophy in multiple models of muscle wasting, including disuse and cachexia. MuRF1 is also known as TRIM63, SMRZ, and RNF28, and its expression is upregulated after TNFα treatment in C2C12 cells and muscle tissue, while localization of MuRF1 protein has been observed in the cytoplasm and nucleus of cells.

Images



Western blot analysis of human full length MuRF1 recombinant protein. The blot was probed with mouse monoclonal MuRF1 (C-terminal region) at 1:250 (lane 1) and 1:1000 (lane 2) and rabbit polyclonal MuRF1 (C-terminal region) at 1:1000 (lanes 3) and 1:4000 (lane 4).

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