

**Anti-MuRF1 (C-terminal region) Antibody**  
**Catalog # AN1841****Specification****Anti-MuRF1 (C-terminal region) Antibody - Product Information**

Primary Accession	<a href="#">Q969Q1</a>
Reactivity	<b>Bovine</b>
Host	<b>Mouse</b>
Clonality	<b>Mouse Monoclonal</b>
Isotype	<b>IgG1</b>
Calculated MW	<b>40248</b>

**Anti-MuRF1 (C-terminal region) Antibody - 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 TNF $\alpha$  treatment in C2C12 cells and muscle tissue, while localization of MuRF1 protein has been observed in the cytoplasm and nucleus of cells.

**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

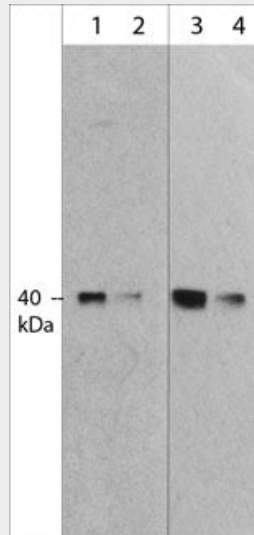
**Anti-MuRF1 (C-terminal region) Antibody - Protocols**

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](#)

#### **Anti-MuRF1 (C-terminal region) Antibody - 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).

#### **Anti-MuRF1 (C-terminal region) Antibody - 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 TNF $\alpha$  treatment in C2C12 cells and muscle tissue, while localization of MuRF1 protein has been observed in the cytoplasm and nucleus of cells.