

**Anti-Atrogin-1 Antibody**  
**Catalog # AN1649****Specification**

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**Anti-Atrogin-1 Antibody - Product Information**

Application	WB
Primary Accession	<a href="#">Q9CPU7</a>
Reactivity	Bovine
Host	Rabbit
Clonality	Rabbit Polyclonal
Isotype	IgG
Calculated MW	41504

**Anti-Atrogin-1 Antibody - Additional Information**

Gene ID	67731
<b>Other Names</b>	
MAFbx, FBX32, Atrogin	

**Target/Specificity**

Atrogin-1/Muscle Atrophy F-box (MAFbx) is an E3 ubiquitin ligase that mediates proteolysis events that occur during muscle atrophy. This ATP-dependent ubiquitin-mediated proteolysis occurs in response to a variety of catabolic states in muscle. Atrogin is expressed in heart and skeletal muscle, and is upregulated during muscle atrophy. In addition, Atrogin expression increases in C2C12 myotubes after stimulation with cytokines. Atrogin is thought to recognize and bind to some phosphorylated proteins and promote their ubiquitination and degradation during skeletal muscle atrophy. Atrogin interacts with MyoD by ubiquitination via a sequence found in transcriptional coactivators and therefore may play an important role in the course of muscle differentiation by determining the abundance of MyoD. Mice deficient in Atrogin are resistant to muscle atrophy.

**Format**

Antigen Affinity Purified

**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-Atrogin-1 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

**Shipping**

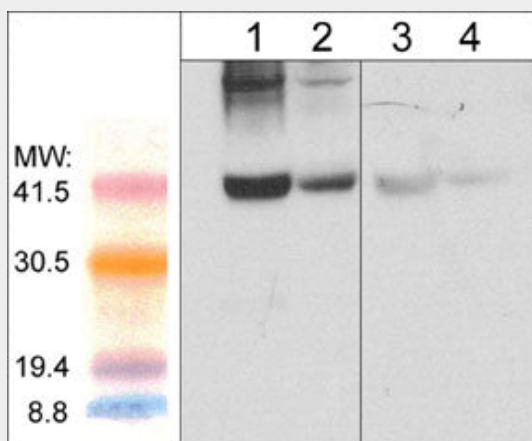
Blue Ice

**Anti-Atrogin-1 Antibody - Protocols**

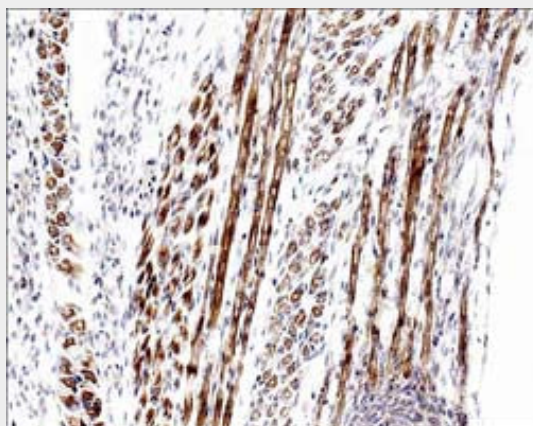
Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

### Anti-Atrogin-1 Antibody - Images



Western blot image of mouse gastrocnemius (lanes 1 & 3) and mouse diaphragm tissue lysate (lanes 2 & 4). The blot was probed with anti-Atrogin-1 (AP2041; lanes 1-4) in the presence (lanes 3 & 4) or absence (lanes 1 & 2) of Atrogin-1 peptide (AX2045).



Formalin fixed, citric acid treated paraffin sections of E16 mouse skeletal muscle. Sections were probed with anti-Atrogin-1 (AP2041) then anti-Rabbit:HRP before detection using DAB. (Images provided by Carl Hobbs and Dr. Pat Doherty at Wolfson Centre for Age-Related Diseases, King's College London).

### Anti-Atrogin-1 Antibody - Background

Atrogin-1/Muscle Atrophy F-box (MAFbx) is an E3 ubiquitin ligase that mediates proteolysis events that occur during muscle atrophy. This ATP-dependent ubiquitin-mediated proteolysis occurs in response to a variety of catabolic states in muscle. Atrogin is expressed in heart and skeletal muscle, and is upregulated during muscle atrophy. In addition, Atrogin expression increases in C2C12 myotubes after stimulation with cytokines. Atrogin is thought to recognize and bind to some phosphorylated proteins and promote their ubiquitination and degradation during skeletal muscle

atrophy. Atrogin interacts with MyoD by ubiquitination via a sequence found in transcriptional coactivators and therefore may play an important role in the course of muscle differentiation by determining the abundance of MyoD. Mice deficient in Atrogin are resistant to muscle atrophy.