

Atrogin-1 Peptide

Cat. # AX2045

Size 50 µg

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.

References

Bodine, S.C. et al. (2001) Science 294: 1704-8.

Peptide Sequence:

A synthetic peptide corresponding to amino acids 23 to 35 in mouse Atrogin-1. This sequence is highly homologous to human and rat Atrogin (F-box only protein 32).

Buffer and Storage:

Blocking Peptide is supplied in 50µl phosphate-buffered saline and 0.05% sodium azide.
Store at -20°C. Stable for 1 year.

Applications:

Blocking 1:1000

ELISA 50 ng/well

End user should determine optimal concentration dependent on the concentration of the antibody.
Recommended for blocking antibody reactivity in Western blot and immunocytochemistry.
ELISA established in 96-well Nunc immunoplates where peptide was bound to plates for 2 hrs in 0.1 M sodium carbonate buffer, pH 8.5.

Specificity:

The peptide is specifically recognized by Atrogin-1 antibody (AP2041) in ELISA, and has been shown to block the reactivity of AP2041 during Western blot.

Related Products:

AP2041 Atrogin-1 Rabbit Polyclonal
MP3401 MuRF1 (C-terminal region) Rabbit Polyclonal
MX3405 MuRF1 (C-terminal region) Peptide
MK6900 Mouse Tissue Lysate Sampler Kit
MK6170 Muscle Atrophy Ubiquitin Ligase Antibody Sampler Kit

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