

## MuRF1 (Muscle-specific RING finger protein 1)

Cat. # UB301

**Background:** MuRF1 (Muscle-specific RING-finger protein 1) is an E3 (ubiquitin protein ligase) that is involved in the conjugation of ubiquitin to target substrates along with E1 and E2 enzymes. MuRF1 is also known as TRIM63 (tripartite motif containing 63) containing a RING-finger/B-box/coiled-coil tripartite fold and is a member of the RING-domain E3 family. MuRF1 has been implicated as a component of atrophy-associated accelerated proteolysis. It is upregulated in a number of different models of atrophy and interacts with numerous myofibrillar proteins.

**Alternate names:** TRIM63 (tripartite motif-containing 63)

### Product Information

<b>Purity:</b>	≥ 90% by SDS-PAGE
<b>Molecular Weight:</b>	40kDa
<b>Quantity:</b>	25 µg
<b>Physical State:</b>	Liquid
<b>Source:</b>	Human Recombinant
<b>Tag:</b>	His <sub>6</sub> SUMO
<b>Activity:</b>	Typical enzyme concentration of 100 nM - 5 mM is used for in vitro conjugation, depending on conditions.
<b>Storage:</b>	-80° C. Avoid repeated freeze/thaw cycles

### References

- 1) Bodine, S.C., et al., Identification of ubiquitin ligases required for skeletal muscle atrophy. *Science*, 2001. **294**:1704-8.
- 2) Centner, T., et al., Identification of muscle specific ring finger proteins as potential regulators of the titin kinase domain. *J Mol Biol*, 2001. **306**:717-26.
- 3) Kedar, V., et al., Muscle-specific RING finger 1 is a bona fide ubiquitin ligase that degrades cardiac troponin I. *Proc Natl Acad Sci USA*, 2004. **101**:18135-40.
- 4) Mrosek, M., et al., Molecular determinants for the recruitment of the ubiquitin-ligase MuRF-1 onto M-line titin. *FASEB J*, 2007. **21**:1383-92.

All products are for research use only • Not intended for human or animal diagnostic or therapeutic uses  
Copyright © 2009 LifeSensors, Inc. All Rights Reserved