

Rabbit MuRF1 Polyclonal Antibody | anti-MuRF1 antibody

MuRF1 (C-terminal region) Antibody

CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA71659	Rabbit	Human, Rat, Mouse	Immunocytochemistry, ELISA, Western Blot

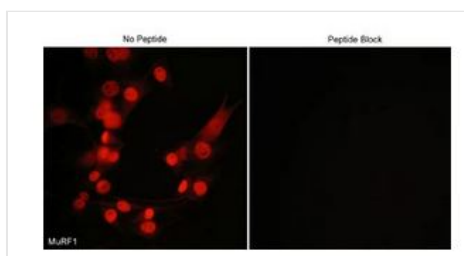
PRODUCT SYNONYMS

MuRF1; Polyclonal Antibody; MuRF1 (C-terminal region) Antibody; MuRF1 (C-terminal region); MuRF pAb; anti-MuRF1 antibody

PRODUCT SPECIFICATIONS

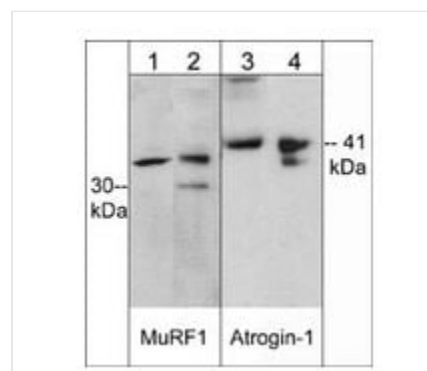
Host	Rabbit
Reactivity	Human, Rat, Mouse
Clonality	Polyclonal
Specificity	This antibody was affinity purified using MuRF1 (C-terminal region) peptide (without carrier). The antibody detects 38 and 30kDa* proteins corresponding to the apparent molecular mass of MuRF1 isoforms on SDS-PAGE immunoblots of mouse C2C12 cells, and detects a 38kDa band in mouse heart and muscle tissue.
Form/Format	Rabbit polyclonal, affinity-purified antibody is supplied in 100ul phosphate-buffered saline, 50% glycerol, 1mg/ml BSA, and 0.05% sodium azide.
Applicable Applications for anti-MuRF1 antibody	ICC (Immunocytochemistry), ELISA, WB (Western Blot)
Immunogen	MuRF1 (C-terminal) synthetic peptide (coupled to KLH) corresponding to amino acid residues in the C-terminal half of human MuRF1. This peptide sequence is highly conserved in rat and mouse MuRF1, and has 50% homology to MuRF2 (TRIM-55).
Preparation and Storage	Store at -20 degree C. Stable for 1 year.

IMAGES



ICC (Immunocytochemistry)

Immunocytochemical labeling of MuRF1 in mouse C2C12 cells. The cells were labeled with rabbit polyclonal MuRF1 antibody, then detected using appropriate secondary antibody conjugated to Cy3. The antibody was used in the absence (left) or presence (right) of blocking peptide (MX3405).



WB (Western Blot)

Western blot analysis of mouse heart tissue (lanes 1 & 3) or C2C12 cells (lanes 2 & 4). The blot was probed with anti-MuRF1 (C-terminal region) (lanes 1 & 2) or anti-Atrogin-1 (lanes 3 & 4).

ADDITIONAL INFORMATION

Related Product Information for anti-MuRF1 antibody	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 TNFalpha treatment in C2C12 cells and muscle tissue, while localization of MuRF1 protein has been observed in the cytoplasm and nucleus of cells.
References	Leger, B. et al. (2006) J Physiol. 576(3):923. Bodine, S.C. (2001) Science. 294(5547):1704. Dai, K.S. & Liews, C.C. (2001) J Biol. Chem. 276(26):23992.

NCBI AND UNIPROT INFORMATION

NCBI GI #	21362898
NCBI GeneID	84676
UniProt Accession #	Q969Q1; Q5T2I1; Q96BD3; Q96KD9; Q9BYV4; B4DN95
Molecular Weight	353
NCBI Official Full Name	E3 ubiquitin-protein ligase TRIM63
NCBI Official Synonym Full Names	tripartite motif containing 63, E3 ubiquitin protein ligase
NCBI Official Symbol	TRIM63
NCBI Official Synonym Symbols	IRF; SMRZ; MURF1; MURF2; RNF28
NCBI Protein Information	E3 ubiquitin-protein ligase TRIM63; ring finger protein 28; iris ring finger protein; muscle specific ring finger protein 2; muscle-specific RING finger protein 1; tripartite motif-containing protein 63; striated muscle RING zinc finger protein
UniProt Protein Name	E3 ubiquitin-protein ligase TRIM63
UniProt Gene Name	TRIM63
UniProt Synonym Gene Names	IRF; MURF1; RNF28; SMRZ; MuRF-1; MuRF1
UniProt Entry Name	TRI63_HUMAN

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.