

**TRIM55 Blocking Peptide (Center)**  
**Synthetic peptide**  
**Catalog # BP21736c****Specification**

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**TRIM55 Blocking Peptide (Center) - Product Information**Primary Accession [Q9BYV6](#)**TRIM55 Blocking Peptide (Center) - Additional Information****Gene ID** 84675**Other Names**

Tripartite motif-containing protein 55, Muscle-specific RING finger protein 2, MuRF-2, MuRF2, RING finger protein 29, TRIM55, MURF2, RNF29

**Target/Specificity**

The synthetic peptide sequence is selected from aa 236-250 of HUMAN TRIM55

**Format**

Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

**Storage**

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

**Precautions**

This product is for research use only. Not for use in diagnostic or therapeutic procedures.

**TRIM55 Blocking Peptide (Center) - Protein Information****Name** TRIM55**Synonyms** MURF2, RNF29**Function**

E3 ubiquitin ligase that plays an important role in regulating cardiac development and contractility, muscle growth, metabolism, and fiber-type differentiation. Acts as a critical factor that regulates cardiomyocyte size during development in concert with TRIM63 by regulating E2F1-mediated gene expression (By similarity). Plays a role in apoptosis induction in cardiomyocytes by promoting ubiquitination of the DUSP1 phosphatase. Promotes non-canonical NF- $\kappa$ B signaling and B-cell-mediated immune responses by mediating NFKB2 'Lys-48'-linked ubiquitination and processing. In turn, NFKB2 is further processed by valosin-containing protein/VCP, an ATPase that mediates ubiquitin-dependent protein degradation by the proteasome. May play a role in preventing macrophages from producing inflammatory factors and migrating by downregulating the level of nuclear NF- $\kappa$ B subunit RELA. Modifies also PPARG via polyubiquitination and accelerates PPARG proteasomal degradation to inhibit its activity (PubMed: <http://www.uniprot.org/citations/36737649>).

**Cellular Location**

Nucleus {ECO:0000250|UniProtKB:G3X8Y1}. Cytoplasm {ECO:0000250|UniProtKB:G3X8Y1}.  
Note=TLR4 signaling pathway promotes nuclear translocation. {ECO:0000250|UniProtKB:G3X8Y1}

**Tissue Location**

Highly expressed in muscle. Low-level expression in liver.

**TRIM55 Blocking Peptide (Center) - Protocols**

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

- [Blocking Peptides](#)

**TRIM55 Blocking Peptide (Center) - Images****TRIM55 Blocking Peptide (Center) - Background**

May regulate gene expression and protein turnover in muscle cells.

**TRIM55 Blocking Peptide (Center) - References**

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Pizon V.,et al.J. Cell Sci. 115:4469-4482(2002).  
Ota T.,et al.Nat. Genet. 36:40-45(2004).  
Mural R.J.,et al.Submitted (JUL-2005) to the EMBL/GenBank/DDBJ databases.  
Kalnine N.,et al.Submitted (MAY-2003) to the EMBL/GenBank/DDBJ databases.