10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

TRIM55 Blocking Peptide (Center)

Synthetic peptide
Catalog # BP21736c

Specification

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. Also modifies PPARG via polyubiquitination and accelerates PPARG proteasomal degradation to inhibit its activity (PubMed: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.