

TRIM24 Antibody (N-term) Blocking Peptide Synthetic peptide Catalog # BP18114a

Specification

TRIM24 Antibody (N-term) Blocking Peptide - Product Information

Primary Accession

<u>015164</u>

TRIM24 Antibody (N-term) Blocking Peptide - Additional Information

Gene ID 8805

Other Names

Transcription intermediary factor 1-alpha, TIF1-alpha, 632-, E3 ubiquitin-protein ligase TRIM24, RING finger protein 82, Tripartite motif-containing protein 24, TRIM24, RNF82, TIF1, TIF1A

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.

TRIM24 Antibody (N-term) Blocking Peptide - Protein Information

Name TRIM24

Synonyms RNF82, TIF1, TIF1A

Function

Transcriptional coactivator that interacts with numerous nuclear receptors and coactivators and modulates the transcription of target genes. Interacts with chromatin depending on histone H3 modifications, having the highest affinity for histone H3 that is both unmodified at 'Lys-4' (H3K4me0) and acetylated at 'Lys-23' (H3K23ac). Has E3 protein-ubiquitin ligase activity. During the DNA damage response, participates in an autoregulatory feedback loop with TP53. Early in response to DNA damage, ATM kinase phosphorylates TRIM24 leading to its ubiquitination and degradation. After sufficient DNA repair has occurred, TP53 activates TRIM24 transcription, ultimately leading to TRIM24-mediated TP53 ubiquitination and degradation (PubMed:24820418). Plays a role in the regulation of cell proliferation and apoptosis, at least in part via its effects on p53/TP53 levels. Up- regulates ligand-dependent transcription activation by AR, GCR/NR3C1, thyroid hormone receptor (TR) and ESR1. Modulates transcription activation by retinoic acid (RA) receptors, including RARA. Plays a role in regulating retinoic acid-dependent proliferation of hepatocytes (By similarity). Participates also in innate immunity by mediating the specific 'Lys-63'-linked ubiquitination of TRAF3 leading to activation of downstream signal transduction of



the type I IFN pathway (PubMed:32324863). Additionally, negatively regulates NLRP3/CASP1/IL-1beta-mediated pyroptosis and cell migration probably by ubiquitinating NLRP3 (PubMed:33724611).

Cellular Location

Nucleus. Cytoplasm. Mitochondrion. Note=Colocalizes with sites of active transcription. Predominantly nuclear. Translocated from nucleus to mitochondria to mediate antiviral immunity (PubMed:32324863). Localizes to sites of DNA damage (PubMed:25593309).

TRIM24 Antibody (N-term) Blocking Peptide - Protocols

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

Blocking Peptides

TRIM24 Antibody (N-term) Blocking Peptide - Images

TRIM24 Antibody (N-term) Blocking Peptide - Background

The protein encoded by this gene mediates transcriptionalcontrol by interaction with the activation function 2 (AF2) regionof several nuclear receptors, including the estrogen, retinoicacid, and vitamin D3 receptors. The protein localizes to nuclearbodies and is thought to associate with chromatin andheterochromatin-associated factors. The protein is a member of thetripartite motif (TRIM) family. The TRIM motif includes threezinc-binding domains - a RING, a B-box type 1 and a B-box type 2 -and a coiled-coil region. Two alternatively spliced transcriptvariants encoding different isoforms have been described for thisgene.

TRIM24 Antibody (N-term) Blocking Peptide - References

Kikuchi, M., et al. Biochim. Biophys. Acta 1793(12):1828-1836(2009)Lowe, J.K., et al. PLoS Genet. 5 (2), E1000365 (2009) :Sugiyama, N., et al. Mol. Cell Proteomics 6(6):1103-1109(2007)Matsuoka, S., et al. Science 316(5828):1160-1166(2007)Yondola, M.A., et al. J. Virol. 81(8):4264-4271(2007)