

TRIM24 / TIF1 Antibody (Internal)

Rabbit Polyclonal Antibody Catalog # ALS16764

Specification

TRIM24 / TIF1 Antibody (Internal) - Product Information

Application IHC, ICC, IF, WB

Primary Accession O15164
Other Accession 8805

Reactivity Human, Mouse, Rat

Host Rabbit Clonality Polyclonal

Isotype IgG Calculated MW 116831

TRIM24 / TIF1 Antibody (Internal) - Additional Information

Gene ID 8805

Other Names

TRIM24, TF1A, TIF1A, Tripartite motif-containing 24, TIF1ALPHA, PTC6, RNF82, TIF1-alpha, Tripartite motif containing 24, HTIF1, RING finger protein 82

Target/Specificity

At least two isoforms of TRIM24 are known to exist.

Reconstitution & Storage

PBS, 0.02% sodium azide. Long term: -20°C; Short term: +4°C. Avoid repeat freeze-thaw cycles.

Precautions

TRIM24 / TIF1 Antibody (Internal) is for research use only and not for use in diagnostic or therapeutic procedures.

TRIM24 / TIF1 Antibody (Internal) - 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:<a



href="http://www.uniprot.org/citations/24820418" target="_blank">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/a>).

Cellular Location

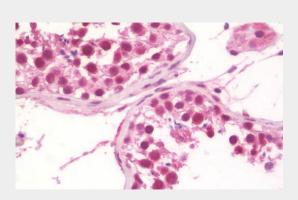
Nucleus. Cytoplasm. Mitochondrion. Note=Colocalizes with sites of active transcription. Predominantly nuclear. Translocated from nucleus to mitochondria to mediate antiviral immunity (PubMed:32324863). Localizes to sites of DNA damage (PubMed:25593309).

TRIM24 / TIF1 Antibody (Internal) - Protocols

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

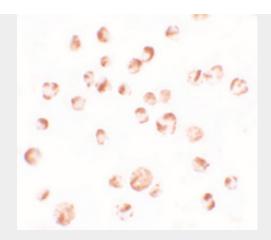
- Western Blot
- Blocking Peptides
- Dot Blot
- <u>Immunohistochemistry</u>
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

TRIM24 / TIF1 Antibody (Internal) - Images

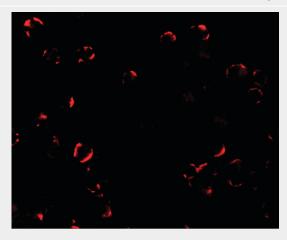


Anti-TRIM24 / TIF1 antibody IHC staining of human testis.

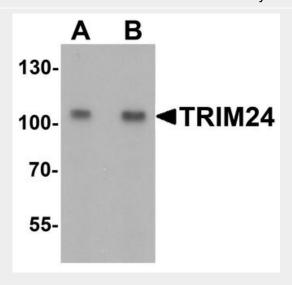




Immunocytochemistry of TRIM24 in EL4 cells with TRIM24 antibody at 2.5 ug/ml.



Immunofluorescence of TRIM24 in EL4 cells with TRIM24 antibody at 20 ug/ml.



Western blot analysis of TRIM24 in EL4 cell lysate with TRIM24 antibody at (A) 0.5 and (B) 1 ug/ml.

TRIM24 / TIF1 Antibody (Internal) - Background

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ubiquitination and proteasomal degradation of p53/TP53. 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).

TRIM24 / TIF1 Antibody (Internal) - References

Thenot S.,et al.J. Biol. Chem. 272:12062-12068(1997). Venturini L.,et al.Oncogene 18:1209-1217(1999). Ota T.,et al.Nat. Genet. 36:40-45(2004). Scherer S.W.,et al.Science 300:767-772(2003). Mural R.J.,et al.Submitted (JUL-2005) to the EMBL/GenBank/DDBJ databases.