

TIF1a/TRIM24 Antibody
Rabbit Polyclonal Antibody
Catalog # ABV10593**Specification**

TIF1a/TRIM24 Antibody - Product Information

Application	WB
Primary Accession	O15164
Other Accession	NP_056989.2
Reactivity	Human, Mouse
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Calculated MW	116831

TIF1a/TRIM24 Antibody - Additional Information**Gene ID 8805**

Application & Usage	Western blotting (1:500 - 1:2000). However, the optimal concentrations should be determined individually. HeLa cell lysate can be used as a positive control. The antibody recognizes the TIF1α/TRIM24 of human and mouse origins. Reactivity to other species has not been tested.
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Other Names

TF1A, TIF1, hTIF1, TIF1A, TIF1 Alpha, Transcriptional Intermediary Factor 1 Alpha, TRIM24, Tripartite Motif-Containing 24, RNF82, Ring Finger Protein 82, PTC6

Target/Specificity

TRIM24/TIF1a

Antibody Form

Liquid

Appearance

Colorless liquid

Formulation

100 μ l affinity purified rabbit polyclonal antibody in phosphate-buffered saline (PBS) containing 30% glycerol, 0.5% BSA and 0.01% thimerosal.

Handling

The antibody solution should be gently mixed before use.

Reconstitution & Storage

-20 °C

Background Descriptions

Precautions

TIF1a/TRIM24 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

TIF1a/TRIM24 Antibody - 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). Also participates 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).

TIF1a/TRIM24 Antibody - Protocols

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

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

TIF1a/TRIM24 Antibody - Images**TIF1a/TRIM24 Antibody - Background**

TIF1 Alpha/TRIM24 is a member of a family of proteins that control transcription and chromatin remodeling through their interaction with transcription factors. The family of TIF1s (transcriptional intermediary factor 1) includes TIF1-alpha, TIF1-beta, and TIF1-gamma. TIF1-alpha plays an important role in development and mediates transcriptional control by interacting with the AF2 region of nuclear receptors such as estrogen, retinoic acid, and vitamin D3 receptors. TIF1-alpha has been shown to be a repressor of transcription. This transcriptional repression involves histone deacetylation and interaction with members of the heterochromatin protein 1 family.