

# TRIM24 Antibody

Rabbit mAb Catalog # AP92950

### **Product Information**

Application	WB, IHC, IF, ICC, IHF
Primary Accession	<u>O15164</u>
Reactivity	Human
Clonality	Monoclonal
Other Names	hTIF1; PTC6; RNF82; TF1A; TIF1; TIF1A; TIF1ALPHA; Trim24;
lsotype	Rabbit IgG
Host	Rabbit
Calculated MW	116831

#### **Additional Information**

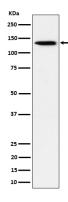
Dilution	WB 1:500~1:2000 IHC 1:50~1:200 ICC/IF 1:50~1:200
Purification	Affinity-chromatography
Immunogen	A synthesized peptide derived from human TRIM24
Description	Transcriptional coactivator that interacts with numerous nuclear receptors
	and coactivators and modulates the transcription of target genes. 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).
Storage Condition and Buffer	
	azide and 50% glycerol. Store at +4°C short term. Store at -20°C long term.
	Avoid freeze / thaw cycle.

#### **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: <u>32324863</u> ). Additionally, negatively regulates NLRP3/CASP1/IL- 1beta-mediated pyroptosis and cell migration probably by ubiquitinating NLRP3 (PubMed: <u>33724611</u> ).
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).

## Images



Western blot analysis of TRIM24 expression in HeLa cell lysate.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.