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KD-Validated Anti-Tripartite motif containing 24 Rabbit Monoclonal Antibody

Rabbit monoclonal antibody
Catalog # AGI1415

Specification

KD-Validated Anti-Tripartite motif containing 24 Rabbit Monoclonal Antibody - Product Information

Application	**WB, FC, ICC**
Primary Accession	O15164
Reactivity	**Human**
Clonality	**Monoclonal**
Isotype	**Rabbit IgG**
Calculated MW	**Predicted, 117 kDa , observed, 130 kDa KDa**
Gene Name	**TRIM24**
Aliases	**TRIM24; Tripartite Motif Containing 24; RNF82; TIF1A; HTIF1; TIF1; RING-Type E3 Ubiquitin Transferase TIF1-Alpha; Transcription Intermediary Factor 1-Alpha; Transcriptional Intermediary Factor 1; E3 Ubiquitin-Protein Ligase TRIM24; RING Finger Protein 82; TIF1-Alpha; Tripartite Motif-Containing Protein 24; Tripartite Motif-Containing 24; EC 2.3.2.27; TIF1ALPHA; EC 6.3.2; Tif1a; PTC6; TF1A**
Immunogen	**A synthesized peptide derived from human TRIM24**

KD-Validated Anti-Tripartite motif containing 24 Rabbit Monoclonal Antibody - Additional Information

Gene ID	**8805**

Other Names
Transcription intermediary factor 1-alpha, TIF1-alpha, 2.3.2.27, E3 ubiquitin-protein ligase TRIM24, RING finger protein 82, RING-type E3 ubiquitin transferase TIF1-alpha, Tripartite motif-containing protein 24, TRIM24, RNF82, TIF1, TIF1A

KD-Validated Anti-Tripartite motif containing 24 Rabbit Monoclonal 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).

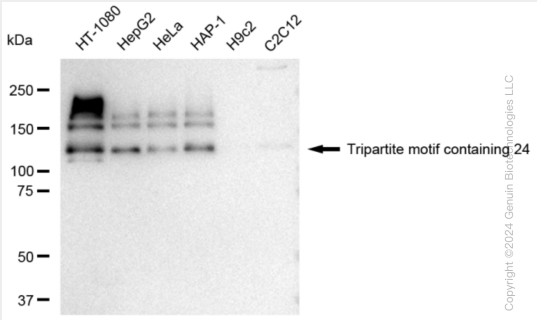
Cellular Location
Nucleus. Cytoplasm. Mitochondrion. Note=Colocalizes with sites of active transcription. Predominantly nuclear. Translocated from nucleus to mitochondria to mediate antiviral immunity (PubMed:32324863). Localizes to sites of DNA damage (PubMed:25593309).

KD-Validated Anti-Tripartite motif containing 24 Rabbit Monoclonal 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 Cytomety
- Cell Culture

KD-Validated Anti-Tripartite motif containing 24 Rabbit Monoclonal Antibody - Images



Western blotting analysis using anti-Tripartite motif containing 24 antibody (Cat#AGI1415). Total cell lysates (30 µg) from various cell lines were loaded and separated by SDS-PAGE. The blot was incubated with anti-Tripartite motif containing 24 antibody (Cat#AGI1415, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody respectively.

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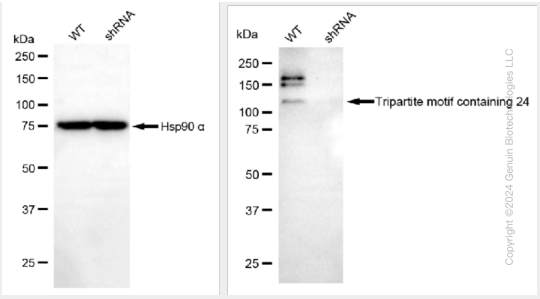
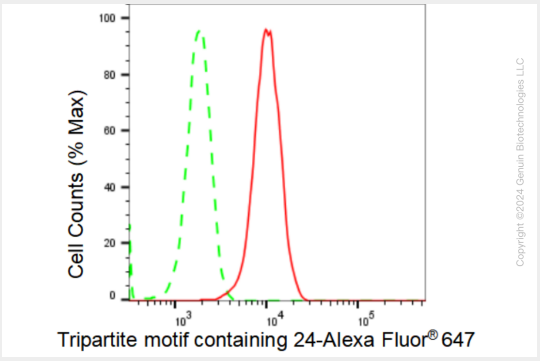
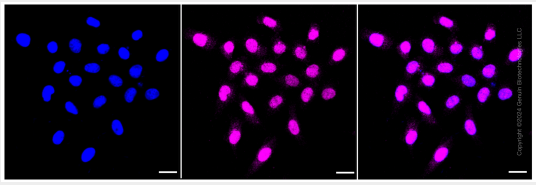


Western blotting analysis using anti-Tripartite motif containing 24 antibody (Cat#AGI1415). Tripartite motif containing 24 expression in wild type (WT) and Tripartite motif containing 24 shRNA knockdown (KD) HeLa cells with 30 µg of total cell lysates. β-Tubulin serves as a loading control. The blot was incubated with anti-Tripartite motif containing 24 antibody (Cat#AGI1415, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody respectively.



Flow cytometric analysis of Tripartite motif containing 24 expression in HepG2 cells using Tripartite motif containing 24 antibody (Cat#AGI1415, 1:2,000). Green, isotype control; red, Tripartite motif containing 24.



Immunocytochemical staining of HepG2 cells with Tripartite motif containing 24 antibody (Cat#AGI1415, 1:1,000). Nuclei were stained blue with DAPI; Tripartite motif containing 24 was stained magenta with Alexa Fluor® 647. Images were taken using Leica stellaris 5. Protein abundance based on laser Intensity and smart gain: Medium. Scale bar: 20 µm.