

TRIM21 / RO52 Antibody (C-Terminus)

Goat Polyclonal Antibody Catalog # ALS12330

Specification

TRIM21 / RO52 Antibody (C-Terminus) - Product Information

Application IHC Primary Accession P19474

Reactivity Human, Monkey

Host Goat
Clonality Polyclonal
Calculated MW 54kDa KDa

TRIM21 / RO52 Antibody (C-Terminus) - Additional Information

Gene ID 6737

Other Names

E3 ubiquitin-protein ligase TRIM21, 6.3.2.-, 52 kDa Ro protein, 52 kDa ribonucleoprotein autoantigen Ro/SS-A, RING finger protein 81, Ro(SS-A), Sjoegren syndrome type A antigen, SS-A, Tripartite motif-containing protein 21, TRIM21, RNF81, RO52, SSA1

Target/Specificity

Human TRIM21.

Reconstitution & Storage

Store at -20°C. Minimize freezing and thawing.

Precautions

TRIM21 / RO52 Antibody (C-Terminus) is for research use only and not for use in diagnostic or therapeutic procedures.

TRIM21 / RO52 Antibody (C-Terminus) - Protein Information

Name TRIM21 (HGNC:11312)

Synonyms RNF81, RO52, SSA1

Function

E3 ubiquitin-protein ligase whose activity is dependent on E2 enzymes, UBE2D1, UBE2D2, UBE2E1 and UBE2E2 (PubMed:26347139, PubMed:16297862, PubMed:16316627, PubMed:16472766, PubMed:16880511, PubMed:18022694, PubMed:18361920, PubMed:<a href="http://www.uniprot.org/citations/18641315"



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target=" blank">18641315, PubMed:18845142, PubMed:19675099). Forms a ubiquitin ligase complex in cooperation with the E2 UBE2D2 that is used not only for the ubiquitination of USP4 and IKBKB but also for its self-ubiquitination (PubMed: 16880511, PubMed:19675099). Component of cullin-RING-based SCF (SKP1-CUL1-F-box protein) E3 ubiquitin-protein ligase complexes such as SCF(SKP2)-like complexes (PubMed: 16880511). A TRIM21-containing SCF(SKP2)-like complex is shown to mediate ubiquitination of CDKN1B ('Thr-187' phosphorylated- form), thereby promoting its degradation by the proteasome (PubMed:16880511). Monoubiquitinates IKBKB that will negatively regulates Tax-induced NF-kappa-B signaling (PubMed:19675099). Negatively regulates IFN-beta production post-pathogen recognition by catalyzing polyubiquitin-mediated degradation of IRF3 (PubMed:18641315). Mediates the ubiquitin-mediated proteasomal degradation of IgG1 heavy chain, which is linked to the VCP-mediated ER-associated degradation (ERAD) pathway (PubMed:18022694). Promotes IRF8 ubiquitination, which enhanced the ability of IRF8 to stimulate cytokine genes transcription in macrophages (By similarity). Plays a role in the regulation of the cell cycle progression (PubMed:16880511). Enhances the decapping activity of DCP2 (PubMed:18361920). Exists as a ribonucleoprotein particle present in all mammalian cells studied and composed of a single polypeptide and one of four small RNA molecules (PubMed:1985094, PubMed:8666824). At least two isoforms are present in nucleated and red blood cells, and tissue specific differences in RO/SSA proteins have been identified (PubMed:8666824). The common feature of these proteins is their ability to bind HY RNAs.2 (PubMed:8666824). Involved in the regulation of innate immunity and the inflammatory response in response to IFNG/IFN-gamma (PubMed: 26347139). Organizes autophagic machinery by serving as a platform for the assembly of ULK1, Beclin 1/BECN1 and ATG8 family members and recognizes specific autophagy targets, thus coordinating target recognition with assembly of the autophagic apparatus and initiation of autophagy (PubMed: 26347139). Regulates also autophagy through FIP200/RB1CC1 ubiquitination and subsequent decreased protein stability (PubMed:36359729). Represses the innate antiviral response by facilitating the formation of the NMI-IFI35 complex through 'Lys-63'- linked ubiquitination of NMI (PubMed: 26342464). During viral infection, promotes cell pyroptosis by mediating 'Lys-6'-linked ubiquitination of ISG12a/IFI27, facilitating its translocation into the mitochondria and subsequent CASP3 activation (PubMed:36426955). When up-regulated through the IFN/JAK/STAT signaling pathway, promotes 'Lys-27'-linked ubiquitination of MAVS, leading to the recruitment of TBK1 and up-regulation of innate immunity (PubMed:29743353). Mediates 'Lys-63'- linked polyubiquitination of G3BP1 in response to heat shock, leading to stress granule disassembly (PubMed: 36692217).

Cellular Location

Cytoplasm. Cytoplasmic vesicle, autophagosome. Nucleus. Cytoplasm, P-body. Cytoplasm, Stress





granule. Note=Enters the nucleus upon exposure to nitric oxide (PubMed:18361920). Localizes to small dot- or rod-like structures in the cytoplasm, called processing bodies (P-bodies) that are located underneath the plasma membrane and also diffusely in the cytoplasm (PubMed:18361920). They are located along the microtubules and are highly motile in cells (PubMed:18361920). Colocalizes with DCP2 in P-bodies (PubMed:18361920). Localizes to stress granules in response to oxidative stress (PubMed:36692217).

Tissue Location

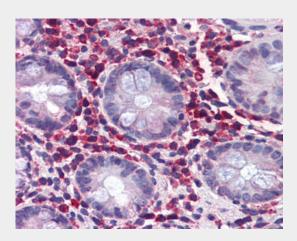
Isoform 1 and isoform 2 are expressed in fetal and adult heart and fetal lung

TRIM21 / RO52 Antibody (C-Terminus) - 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

TRIM21 / RO52 Antibody (C-Terminus) - Images



Anti-TRIM21 antibody IHC of human colon.

TRIM21 / RO52 Antibody (C-Terminus) - Background

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TRIM21 / RO52 Antibody (C-Terminus) - References

Itoh K., et al.J. Clin. Invest. 87:177-186(1991). Chan E.K., et al.J. Clin. Invest. 87:68-76(1991). Tsugu H., et al. Genomics 24:541-548(1994). Keech C.L., et al. Clin. Exp. Immunol. 104:255-263(1996). Bepler G., et al. Genomics 55:164-175(1999).