10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

TRIM21 antibody - N-terminal region

Rabbit Polyclonal Antibody
Catalog # AI10615

Product Information

Application	WB
Primary Accession	P19474
Other Accession	NM_003141, NP_003132
Reactivity	Human, Mouse, Rat, Dog
Predicted	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Calculated MW	54170

Additional Information

Gene ID	6737
Alias Symbol	RNF81, RO52, SSA, SSA1
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
Format	Liquid. Purified antibody supplied in 1x PBS buffer with 0.09% (w/v) sodium azide and 2% sucrose.
Reconstitution & Storage	Add 50 ul of distilled water. Final anti-TRIM21 antibody concentration is 1 mg/ml in PBS buffer with 2% sucrose. For longer periods of storage, store at 20°C. Avoid repeat freeze-thaw cycles.
Precautions	TRIM21 antibody - N-terminal region is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

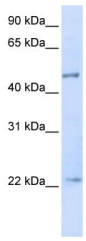
Name	TRIM21 (HGNC:11312)
Synonyms	RNF81, RO52, SSA1
Function	E3 ubiquitin-protein ligase whose activity is dependent on E2 enzymes, UBE2D1, UBE2D2, UBE2E1 and UBE2E2 (PubMed:16297862, PubMed:16316627, PubMed:16472766, PubMed:16880511, PubMed:18022694, PubMed:18361920, PubMed:18641315, PubMed:18845142, PubMed:19675099, PubMed:26347139). 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). Also regulates 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

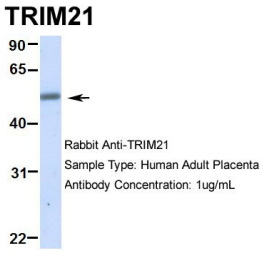
References

Yamochi,T., (2008) Biochem. Biophys. Res. Commun. 370 (1), 195-199 Reconstitution and Storage:For short term use, store at 2-8C up to 1 week. For long term storage, store at -20C in small aliquots to prevent freeze-thaw cycles.

Images



WB Suggested Anti-TRIM21 Antibody Titration: .2-1 ug/ml
ELISA Titer: 1:625
Positive Control: Transfected 293T



Hum. Adult Placenta