

#### TRIM21 antibody - C-terminal region

Rabbit Polyclonal Antibody Catalog # Al11383

### **Specification**

#### TRIM21 antibody - C-terminal region - Product Information

Application WB
Primary Accession P19474

Other Accession NM 003141, NP 003132

Reactivity Human, Rat, Zebrafish, Pig, Horse, Bovine

Predicted Human, Pig, Horse

Host Rabbit
Clonality Polyclonal
Calculated MW 54kDa KDa

#### TRIM21 antibody - C-terminal region - 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 100 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 - C-terminal region is for research use only and not for use in diagnostic or therapeutic procedures.

### TRIM21 antibody - C-terminal region - 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:<a href="http://www.uniprot.org/citations/26347139" target="\_blank">26347139</a>, PubMed:<a href="http://www.uniprot.org/citations/16297862" target="\_blank">16297862</a>, PubMed:<a href="http://www.uniprot.org/citations/16316627" target=" blank">16316627</a>, PubMed:<a href="http://www.uniprot.org/citations/16472766"



target=" blank">16472766</a>, PubMed:<a href="http://www.uniprot.org/citations/16880511" target="blank">16880511</a>, PubMed:<a href="http://www.uniprot.org/citations/18022694" target="blank">18022694</a>, PubMed:<a href="http://www.uniprot.org/citations/18361920" target="\_blank">18361920</a>, PubMed:<a href="http://www.uniprot.org/citations/18641315" target=" blank">18641315</a>, PubMed:<a href="http://www.uniprot.org/citations/18845142" target=" blank">18845142</a>, PubMed:<a href="http://www.uniprot.org/citations/19675099" target=" blank">19675099</a>). 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: <a href="http://www.uniprot.org/citations/16880511" target=" blank">16880511</a>, PubMed:<a href="http://www.uniprot.org/citations/19675099" target="blank">19675099</a>). Component of cullin-RING-based SCF (SKP1-CUL1-F-box protein) E3 ubiquitin-protein ligase complexes such as SCF(SKP2)-like complexes (PubMed: <a href="http://www.uniprot.org/citations/16880511" target=" blank">16880511</a>). 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:<a href="http://www.uniprot.org/citations/16880511" target=" blank">16880511</a>). Monoubiquitinates IKBKB that will negatively regulates Tax-induced NF-kappa-B signaling (PubMed:<a href="http://www.uniprot.org/citations/19675099" target=" blank">19675099</a>). Negatively regulates IFN-beta production post-pathogen recognition by catalyzing polyubiquitin-mediated degradation of IRF3 (PubMed:<a href="http://www.uniprot.org/citations/18641315" target=" blank">18641315</a>). Mediates the ubiquitin-mediated proteasomal degradation of IgG1 heavy chain, which is linked to the VCP-mediated ER-associated degradation (ERAD) pathway (PubMed:<a href="http://www.uniprot.org/citations/18022694" target=" blank">18022694</a>). 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:<a href="http://www.uniprot.org/citations/16880511" target=" blank">16880511</a>). Enhances the decapping activity of DCP2 (PubMed:<a href="http://www.uniprot.org/citations/18361920" target=" blank">18361920</a>). 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: <a  $href="http://www.uniprot.org/citations/1985094" \ target="\_blank">1985094</a>, PubMed:<a$ href="http://www.uniprot.org/citations/8666824" target="blank">8666824</a>). At least two isoforms are present in nucleated and red blood cells, and tissue specific differences in RO/SSA proteins have been identified (PubMed: <a href="http://www.uniprot.org/citations/8666824" target=" blank">8666824</a>). The common feature of these proteins is their ability to bind HY RNAs.2 (PubMed:<a href="http://www.uniprot.org/citations/8666824" target=" blank">8666824</a>). Involved in the regulation of innate immunity and the inflammatory response in response to IFNG/IFN-gamma (PubMed: <a  $href="http://www.uniprot.org/citations/26347139"\ target="\_blank">26347139</a>).\ Organizes$ 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: <a href="http://www.uniprot.org/citations/26347139" target=" blank">26347139</a>). Regulates also autophagy through FIP200/RB1CC1 ubiquitination and subsequent decreased protein stability (PubMed:<a href="http://www.uniprot.org/citations/36359729" target=" blank">36359729</a>). Represses the innate antiviral response by facilitating the formation of the NMI-IFI35 complex through 'Lys-63'- linked ubiquitination of NMI (PubMed: <a href="http://www.uniprot.org/citations/26342464" target=" blank">26342464</a>). 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:<a href="http://www.uniprot.org/citations/36426955" target=" blank">36426955</a>). 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: <a href="http://www.uniprot.org/citations/29743353" target=" blank">29743353</a>). Mediates 'Lys-63'- linked polyubiquitination of G3BP1 in response to heat shock, leading to stress granule disassembly (PubMed: <a href="http://www.uniprot.org/citations/36692217"



target=" blank">36692217</a>).

#### **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**

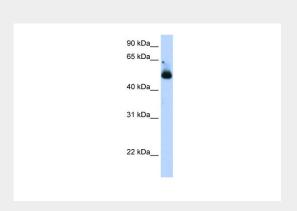
Isoform 1 and isoform 2 are expressed in fetal and adult heart and fetal lung

### TRIM21 antibody - C-terminal region - Protocols

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

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- <u>Immunoprecipitation</u>
- Flow Cytomety
- Cell Culture

### TRIM21 antibody - C-terminal region - Images



WB Suggested Anti-TRIM21 Antibody Titration: 1.25µg/ml

Positive Control: Transfected 293T

## TRIM21 antibody - C-terminal region - 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.