

Anti-RO52 antibody



Description	Unconjugated Rabbit polyclonal to RO52
Model	STJ190475
Host	Rabbit
Reactivity	Human
Applications	ELISA, WB
Immunogen	Synthesized peptide derived from human RO52 protein.
Immunogen Region	140-220aa
Gene ID	6737
Gene Symbol	TRIM21
Dilution range	WB 1:500-2000 ELISA 1:5000-20000
Specificity	RO52 Polyclonal Antibody detects endogenous levels of protein.
Tissue Specificity	Isoform 1 and isoform 2 are expressed in fetal and adult heart and fetal lung.
Purification	RO52 antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.
Note	For Research Use Only (RUO).
Protein Name	E3 ubiquitin-protein ligase TRIM21 52 kDa Ro protein 52 kDa ribonucleoprotein autoantigen Ro/SS-A RING finger protein 81 RING-type E3 ubiquitin transferase TRIM21 Ro SS-A Sjogren syndrome type A antigen SS-
Molecular Weight	52 kDa

Clonality	Polyclonal
Conjugation	Unconjugated
Isotype	IgG
Formulation	Liquid form in PBS containing 50% glycerol, and 0.02% sodium azide.
Concentration	1 mg/ml
Storage Instruction	Store at -20°C, and avoid repeat freeze-thaw cycles.
Database Links	HGNC:11312 OMIM:109092
Alternative Names	E3 ubiquitin-protein ligase TRIM21 52 kDa Ro protein 52 kDa ribonucleoprotein autoantigen Ro/SS-A RING finger protein 81 RING-type E3 ubiquitin transferase TRIM21 Ro SS-A Sjogren syndrome type A antigen SS-
Function	E3 ubiquitin-protein ligase whose activity is dependent on E2 enzymes, UBE2D1, UBE2D2, UBE2E1 and UBE2E2. 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. Component of cullin-RING-based SCF (SKP1-CUL1-F-box protein) E3 ubiquitin-protein ligase complexes such as SCF(SKP2)-like complexes. 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. Monoubiquitinates IKBKB that will negatively regulates Tax-induced NF-kappa-B signaling. Negatively regulates IFN-beta production post-pathogen recognition by polyubiquitin-mediated degradation of IRF3. Mediates the ubiquitin-mediated proteasomal degradation of IgG1 heavy chain, which is linked to the VCP-mediated ER-associated degradation (ERAD) pathway. Promotes IRF8 ubiquitination, which enhanced the ability of IRF8 to stimulate cytokine genes transcription in macrophages. Plays a role in the regulation of the cell cycle progression. Enhances the decapping activity of DCP2. Exists as a ribonucleoprotein particle present in all mammalian cells studied and composed of a single polypeptide and one of four small RNA molecules. At least two isoforms are present in nucleated and red blood cells, and tissue specific differences in RO/SSA proteins have been identified. The common feature of these proteins is their ability to bind HY RNAs.² Involved in the regulation of innate immunity and the inflammatory response in response to IFNG/IFN-gamma. 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. Acts as an autophagy receptor for the degradation of IRF3, hence attenuating type I interferon (IFN)-dependent immune responses .
Sequence and Domain Family	The coiled-coil is necessary for the cytoplasmic localization. The B30.2/SPRY domain is necessary for the cytoplasmic localization, the interaction with IRF3 and for the IRF3-driven interferon beta promoter activity. The RING-type zinc finger is necessary for ubiquitination and for the IRF3-driven interferon beta promoter activity. Interacts with SKP2 and CUL1 in a RING finger-independent manner.
Cellular Localization	Cytoplasm Cytoplasmic vesicle, autophagosome Nucleus Cytoplasm, P-body.

Enters the nucleus upon exposure to nitric oxide. Localizes to small dot- or rod-like structures in the cytoplasm, called cytoplasmic bodies (P-body) that are located underneath the plasma membrane and also diffusely in the cytoplasm and are highly motile in cells. Cytoplasmic bodies are located along the microtubules and do not share the same cytoplasmic bodies with TRIM5. Colocalizes with DCP2 in P-body.

**Post-translational
Modifications**

Autoubiquitinated; does not lead to its proteasomal degradation.
Deubiquitinated by USP4; leading to its stabilization.

St John's Laboratory Ltd

F +44 (0)207 681 2580

T +44 (0)208 223 3081

W <http://www.stjohnslabs.com/>

E info@stjohnslabs.com