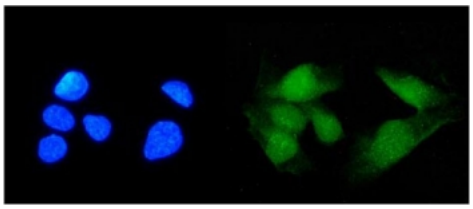
SS-A Antibody / TRIM21 (RQ6012)

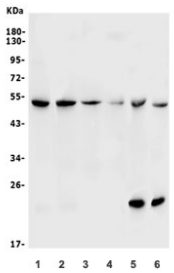
Catalog No.	Formulation	Size
RQ6012	0.5mg/ml if reconstituted with 0.2ml sterile DI water	100 ug

Bulk quote request

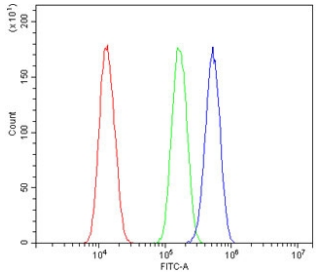
Availability	1-3 business days
Species Reactivity	Human, Mouse, Rat
Format	Antigen affinity purified
Host	Rabbit
Clonality	Polyclonal (rabbit origin)
Isotype	Rabbit IgG
Purity	Affinity purified
Buffer	Lyophilized from 1X PBS with 2% Trehalose and 0.025% sodium azide
UniProt	P19474
Localization	Nuclear, cytoplasmic
Applications	Western Blot : 0.5-1ug/ml Flow Cytometry : 1-3ug/million cells Immunofluorescence : 2-4ug/ml Direct ELISA : 0.1-0.5ug/ml
Limitations	This SS-A antibody is available for research use only.



Immunofluorescence analysis of SS-A / TRIM21 antibody in FFPE human U-2 OS cells. SS-A antibody (green) shows prominent nuclear staining with additional diffuse cytoplasmic signal, while nuclei are counterstained with DAPI (blue); heat-induced epitope retrieval was performed by steaming sections in pH 6 citrate buffer for 20 min prior to staining.



Western blot testing of 1) rat lung, 2) mouse lung, 3) rat thymus, 4) mouse thymus, 5) human HeLa and 6) human ThP-1 lysate with SS-A antibody. Predicted molecular weight ~54 kDa.



Flow cytometry testing of human SiHa cells with SS-A antibody at 1ug/million cells (blocked with goat sera); Red=cells alone, Green=isotype control, Blue= SS-A antibody.

Description

SS-A antibody recognizes Tripartite motif containing 21, encoded by the TRIM21 gene, a cytoplasmic and nuclear E3 ubiquitin ligase that belongs to the tripartite motif family of proteins. TRIM21 is widely known in the literature as Ro52 and 52 kDa Ro protein, and it is one of the principal autoantigens collectively referred to as Sjogren syndrome antigen A. SS-A antibody targeting TRIM21 is therefore commonly associated with research into autoimmune diseases such as Sjogren syndrome and systemic lupus erythematosus, where anti-Ro52 responses are frequently detected.

TRIM21 is characterized by a RING finger domain, one or two B-box domains, and a coiled-coil region, followed by a PRY-SPRY domain that mediates protein interactions. As an E3 ubiquitin ligase, it regulates immune signaling by ubiquitinating key transcription factors and interferon regulatory proteins, thereby modulating type I interferon responses and inflammatory pathways. SS-A antibody directed against TRIM21 is valuable for studying innate immune regulation, antiviral defense mechanisms, and cytokine signaling cascades.

Also referred to as Ro52 antibody and TRIM21 antibody in the literature, SS-A antibody detects a protein expressed in many tissues, with prominent expression in immune cells such as macrophages, dendritic cells, and B cells, as well as epithelial tissues. TRIM21 functions as a cytosolic Fc receptor capable of binding antibody-coated viruses, targeting them for proteasomal degradation, and linking humoral immunity with intracellular pathogen restriction. This dual role in autoimmunity and intracellular immune surveillance makes SS-A antibody an important research tool in immunology and inflammation studies.

At the molecular level, TRIM21 participates in ubiquitin-dependent signaling pathways that influence NF-kappaB activation and interferon production. Dysregulation of TRIM21 expression or function has been implicated in chronic inflammatory conditions and autoimmune pathogenesis. Because Ro52 is frequently examined alongside Ro60 in clinical and translational research, a TRIM21-specific SS-A antibody provides clarity when distinguishing between the 52 kDa and 60 kDa SSA autoantigens.

This recombinant monoclonal antibody recognizes TRIM21 for research applications including immunohistochemistry, western blot, and other laboratory assays designed to assess protein expression and localization in normal and diseased tissues.

Application Notes

Optimal dilution of the SS-A antibody should be determined by the researcher.

Immunogen

Recombinant human protein (amino acids E12-Y475) was used as the immunogen for the SS-A antibody.

Storage

After reconstitution, the SS-A antibody can be stored for up to one month at 4oC. For long-term, aliquot and store at -20oC. Avoid repeated freezing and thawing.