SANTA CRUZ BIOTECHNOLOGY, INC.

52 kDa Ro/SSA (M-20): sc-21367

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

BACKGROUND

Ro autoantigens are of clinical significance because antibodies directed against them are found in most patients with primary Sjogren syndrome, subacute cutaneous lupus erythematosus (SLE), neonatal lupus erythematosus, ANA-negative lupus erythematosus and systemic lupus erythematosus-like disease secondary to homozygous C2 or C4 complement deficiency. Ro/SSA is a ribonucleoprotein that binds to autoantibodies in 35 to 50% of patients with SLE and in up to 97% of patients with Sjogren syndrome. The Ro/SSA particle consists of a single immunoreactive protein noncovalently bound with one of four small RNA molecules. Most anti-Ro/SSA-positive sera have antibodies not only against the immunoreactive protein, but also against an Ro/SSA protein. La/SSB is an autoimmune RNA-binding protein that plays a role in the transcription of RNA polymerase III was originally defined by its reactivity with autoantibodies from patients with Sjogren syndrome and SLE.

REFERENCES

1. Chambers, J.C., et al. 1988. Genomic structure and amino acid sequence domains of the human La autoantigen. J. Biol. Chem. 263: 18043-18051.
2. Itoh, K., et al. 1991. Protein heterogeneity in the human Ro/SSA ribonucleoproteins. The 52- and 60 kDa Ro/SSA autoantigens are encoded by separate genes. J. Clin. Invest. 87: 177-186.
3. Frank, M.B., et al. 1993. The mapping of the human 52 kDa Ro/SSA autoantigen gene to human chromosome 11, and its polymorphisms. Am. J. Hum. Genet. 52: 183-191.
4. Chan, E.K., et al. 1994. Human 60 kDa SSA/Ro ribonucleoprotein autoantigen gene (SSA2) localized to 1q31 by fluorescence *in situ* hybridization. Genomics 23: 298-300.
5. LocusLink Report (LocusID: 600063). http://www.ncbi.nlm.nih.gov/LocusLink

CHROMOSOMAL LOCATION

Genetic locus: Trim21 (mouse) mapping to 7 E3.

SOURCE

52 kDa Ro/SSA (M-20) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the C-terminus of 52 kDa Ro/SSA of mouse origin.

PRODUCT

Each vial contains 200 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-21367 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

STORAGE

Store at 4° C, **DO NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

RESEARCH USE

For research use only, not for use in diagnostic procedures.

APPLICATIONS

52 kDa Ro/SSA (M-20) is recommended for detection of 52 kDa Ro/SSA of mouse and rat origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for 52 kDa Ro/SSA siRNA (m): sc-140349, 52 kDa Ro/SSA shRNA Plasmid (m): sc-140349-SH and 52 kDa Ro/SSA shRNA (m) Lentiviral Particles: sc-140349-V.

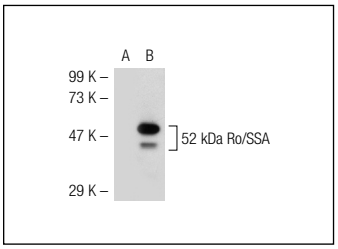
Molecular Weight of 52 kDa Ro/SSA: 52 kDa.

Positive Controls: 52 kDa Ro/SSA (m): 293T Lysate: sc-126343.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

DATA



52 kDa Ro/SSA (M-20): sc-21367. Western blot analysis of 52 kDa Ro/SSA expression in non-transfected: sc-117752 (**A**) and mouse 52 kDa Ro/SSA transfected: sc-126343 (**B**) 293T whole cell lysates.

SELECT PRODUCT CITATIONS

1. Yoshimi, R., et al. 2009. Gene disruption study reveals a nonredundant role for TRIM21/Ro52 in NFκB-dependent cytokine expression in fibroblasts. J. Immunol. 182: 7527-7538.
2. Zhang, Z., et al. 2013. The E3 ubiquitin ligase TRIM21 negatively regulates the innate immune response to intracellular double-stranded DNA. Nat. Immunol. 14: 172-178.

PROTOCOLS

See our web site at www.scbt.com or our catalog for detailed protocols and support products.