SANTA CRUZ BIOTECHNOLOGY, INC.

60 kDa Ro/SSA (AA-3): sc-100844

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.

CHROMOSOMAL LOCATION

Genetic locus: TROVE2 (human) mapping to 1q31.2; Trove2 (mouse) mapping to 1 F.

SOURCE

60 kDa Ro/SSA (AA-3) is a mouse monoclonal antibody raised against recombinant 60 kDa Ro/SSA of human origin.

PRODUCT

Each vial contains 100 µg IgG_{2a} kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

APPLICATIONS

60 kDa Ro/SSA (AA-3) is recommended for detection of 60 kDa Ro/SSA of mouse, rat and human 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 60 kDa Ro/SSA siRNA (h): sc-40918, 60 kDa Ro/SSA siRNA (m): sc-40919, 60 kDa Ro/SSA shRNA Plasmid (h): sc-40918-SH, 60 kDa Ro/SSA shRNA Plasmid (m): sc-40919-SH, 60 kDa Ro/SSA shRNA (h) Lentiviral Particles: sc-40918-V and 60 kDa Ro/SSA shRNA (m) Lentiviral Particles: sc-40919-V.

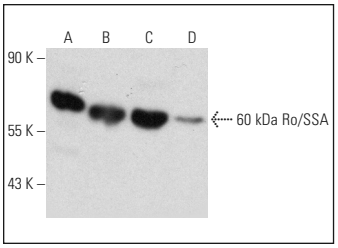
Molecular Weight of 60 kDa Ro/SSA: 60 kDa.

Positive Controls: HeLa whole cell lysate: sc-2200, Jurkat whole cell lysate: sc-2204 or A549 cell lysate: sc-2413.

RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgGκ BP-HRP: sc-516102 or m-IgGκ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 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 m-IgGκ BP-FITC: sc-516140 or m-IgGκ BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz® Mounting Medium: sc-24941 or UltraCruz® Hard-set Mounting Medium: sc-359850.

DATA



60 kDa Ro/SSA (AA-3): sc-100844. Western blot analysis of 60 kDa Ro/SSA expression in HeLa (**A**), A549 (**B**), Jurkat (**C**) and NIH/3T3 (**D**) whole cell lysates.

SELECT PRODUCT CITATIONS

1. Ramírez-Sandoval, R., et al. 2015. An animal model using metallic ions to produce autoimmune nephritis. J. Immunol. Res. 2015: 269610.
2. Hizir, Z., et al. 2017. RNY (YRNA)-derived small RNAs regulate cell death and inflammation in monocytes/macrophages. Cell Death Dis. 8: e2530.
3. Pollak, A.J., et al. 2020. Gapmer antisense oligonucleotides targeting 5S ribosomal RNA can reduce mature 5S ribosomal RNA by two mechanisms. Nucleic Acid Ther. E-published.

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.

PROTOCOLS

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