

La/SSB (22A): sc-80655

BACKGROUND

Ro autoantigens are of clinical significance because antibodies directed against them are found in most patients with primary Sjogren syndrome, sub-acute 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

- Chambers, J.C., Kenan, D., Martin, B.J. and Keene, J.D. 1988. Genomic structure and amino acid sequence domains of the human La autoantigen. *J. Biol. Chem.* 263: 18043-18051.
- Itoh, K., Itoh, Y. and Frank, M.B. 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: SSB (human) mapping to 2q31.1; Ssb (mouse) mapping to 2 C2.

SOURCE

La/SSB (22A) is a mouse monoclonal antibody raised against purified La/SSB of human origin.

PRODUCT

Each vial contains 200 µg IgG₁ kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

APPLICATIONS

La/SSB (22A) is recommended for detection of amino acids 107-200 of La/SSB 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)] and immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500).

Suitable for use as control antibody for La/SSB siRNA (h): sc-40915, La/SSB siRNA (m): sc-40916, La/SSB siRNA (r): sc-270064, La/SSB shRNA Plasmid (h): sc-40915-SH, La/SSB shRNA Plasmid (m): sc-40916-SH, La/SSB shRNA Plasmid (r): sc-270064-SH, La/SSB shRNA (h) Lentiviral Particles: sc-40915-V, La/SSB shRNA (m) Lentiviral Particles: sc-40916-V and La/SSB shRNA (r) Lentiviral Particles: sc-270064-V.

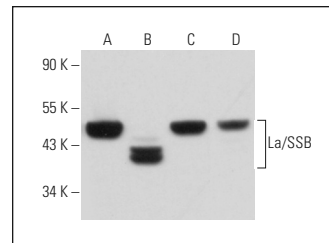
Molecular Weight of La/SSB: 48 kDa.

Positive Controls: HeLa whole cell lysate: sc-2200, Ramos cell lysate: sc-2216 or NAMALWA cell lysate: sc-2234.

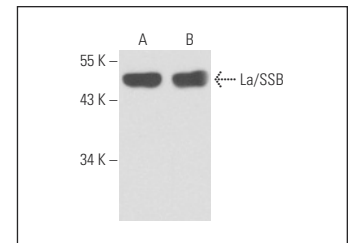
RECOMMENDED SUPPORT REAGENTS

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



La/SSB (22A): sc-80655. Western blot analysis of La/SSB expression in Ramos (A), HCT-8 (B), HeLa (C) and IB4 (D) whole cell lysates.



La/SSB (22A): sc-80655. Western blot analysis of La/SSB expression in Ramos (A) and NAMALWA (B) whole cell lysates.

SELECT PRODUCT CITATIONS

- Langley, A.R., Chambers, H., Christov, C.P. and Krude, T. 2010. Ribonucleoprotein particles containing non-coding Y RNAs, Ro60, La and nucleolin are not required for Y RNA function in DNA replication. *PLoS ONE* 5: e13673.
- Perez-Leal, O., Barrero, C.A., Clarkson, A.B., Casero, R.A., Jr. and Merali, S. 2012. Polyamine-regulated translation of spermidine/spermine-N1-acetyltransferase. *Mol. Cell. Biol.* 32: 1453-1467.
- Yuan, Y., Qiu, J., Lin, Z.T., Li, W., Haley, C., Mui, U.N., Ning, J., Tying, S.K. and Wu, T. 2019. Identification of novel autoantibodies associated with psoriatic arthritis. *Arthritis Rheumatol.* 71: 941-951.

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.