

## La/SSB (44): sc-136258

### BACKGROUND

Ro autoantigens are of clinical significance because antibodies directed against them are found in most patients with primary Sjögren 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 Sjögren 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. The genes which encode the two proteins map to human chromosomes 11p15.5 and 1q31.1, respectively. 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 Sjögren 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.
- Frank, M.B., Itoh, K., Fujisaku, A., Pontarotti, P., Mattei, M.G. and Neas, B.R. 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.
- Chan, E.K., Tan, E.M., Ward, D.C. and Matera, A.G. 1994. Human 60-kDa SS-A/Ro ribonucleoprotein autoantigen gene (SSA2) localized to 1q31 by fluorescence *in situ* hybridization. *Genomics* 23: 298-300.
- LocusLink Report (LocusID: 109092). <http://www.ncbi.nlm.nih.gov/LocusLink>

### CHROMOSOMAL LOCATION

Genetic locus: SSB (human) mapping to 2q31.1; Ssb (mouse) mapping to 2 C2.

### SOURCE

La/SSB (44) is a mouse monoclonal antibody raised against amino acids 179-289 of La/SSB of human origin.

### PRODUCT

Each vial contains 50 µg IgG<sub>1</sub> in 0.5 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

### STORAGE

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

### APPLICATIONS

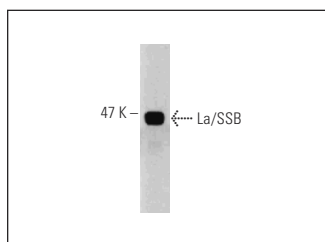
La/SSB (44) is recommended for detection of La/SSB of mouse, rat, human and canine origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)] and immunofluorescence (starting dilution 1:50, dilution 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.

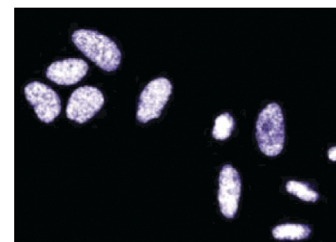
Molecular Weight of La/SSB: 48 kDa.

Positive Controls: HCT-8 cell lysate: sc-24675, Ramos cell lysate: sc-2216 or NAMALWA cell lysate: sc-2234.

### DATA



La/SSB (44): sc-136258. Western blot analysis of La/SSB expression in HCT-8 whole cell lysate.



La/SSB (44): sc-136258. Immunofluorescence staining of HeLa cells showing nuclear localization.

### RESEARCH USE

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

### PROTOCOLS

See our web site at [www.scbt.com](http://www.scbt.com) for detailed protocols and support products.