

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

1. 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.
2. 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.
3. 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.
4. 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.
5. 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 IgG₁ 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

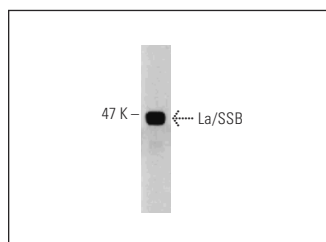
La/SSB (44) is recommended for detection of La/SSB of mouse, rat, human and canine origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)] and immunofluorescence (starting dilution 1:50, dilution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

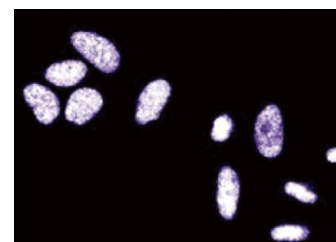
Molecular Weight of La/SSB: 48 kDa.

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 for detailed protocols and support products.