

La/SSB (H-300): sc-33593

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. The genes which encode the two proteins map to human chromosomes 11p15.5 and 1q31, 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 Sjogren syndrome and SLE.

REFERENCES

- Chambers, J.C., et al. 1988. Genomic structure and amino acid sequence domains of the human La autoantigen. *J. Biol. Chem.* 263: 18043-18051.
- 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.
- 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.
- 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.
- LocusLink Report (LocusID: 600063). <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 (H-300) is a rabbit polyclonal antibody raised against amino acids 1-300 mapping at the N-terminus of La/SSB of human origin.

PRODUCT

Each vial contains 200 µg IgG in 1.0 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.

RESEARCH USE

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

APPLICATIONS

La/SSB (H-300) is recommended for detection 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)], 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).

La/SSB (H-300) is also recommended for detection of La/SSB in additional species, including equine, canine, bovine and porcine.

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.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (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 goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

SELECT PRODUCT CITATIONS

- Cheung, P., et al. 2007. Specific interaction of HeLa cell proteins with coxsackievirus B3 3'UTR: La autoantigen binds the 3' and 5'UTR independently of the poly(A) tail. *Cell. Microbiol.* 9: 1705-1715.
- Broytman, O., et al. 2008. Rck/p54 interacts with APP mRNA as part of a multi-protein complex and enhances APP mRNA and protein expression in neuronal cell lines. *Neurobiol. Aging* 30: 1962-1974.
- Weng, K.F., et al. 2014. A cytoplasmic RNA virus generates functional viral small RNAs and regulates viral IRES activity in mammalian cells. *Nucleic Acids Res.* 42: 12789-12805.


 MONOS
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Try **La/SSB (312B): sc-80656** or **La/SSB (B-8): sc-166274**, our highly recommended monoclonal alternatives to La/SSB (H-300).