ALPHA DIAGNOSTIC INTERNATIONAL

Product Specification Sheet

Anti-Human La/SS-B protein and controls

Cat. # SSB522-S	Rabbit Anti-Human La/SS-B protein antiserum	**Size**: 100 ul
Cat. # SSB523-C	Recombinant human La/SS-B protein control for WB	**Size**: 100 ul

The La/SS-B antigen is a 50-kDa nuclear phosphoprotein which – based on sequence homology analysis – appears to be composed of an ATP binding and an RNA binding domain. Several cellular functions of the La/SS-B protein, mostly involved with RNA metabolism, are being discussed, of which an involvement in the correct and efficient termination of RNA polymerase III transcripts has been proven.

La/SS-B antibodies occur with a prevalence of 40-90% in Sjøgren syndrome patients but also with a prevalence of 5-15% in SLE patients. Similar to the Ro/SS-A situation high prevalences of La/SS-B antibodies also occur in subacute cutaneous LE and neonatal lupus syndrome where a high risk of neonatal lupus exists if the mother is positive for Ro/SS-A (52 kDa) and La/SS-B antibodies.

Protein name: Lupus La protein
Synonyms: Sjoegren syndrome type B antigen, SS-B, La ribonucleoprotein, La autoantigen; **Gene name** SSB

FUNCTION: La protein plays a role in the transcription of RNA polymerase III. It is most probably a transcription termination factor. Binds to the 3' termini of virtually all nascent polymerase III transcripts. It is associated with precursor forms of RNA polymerase III transcripts including tRNA and 4.5S, 5S, 7S, and 7-2 RNAs.
SUBCELLULAR LOCATION: Nucleus (Probable).
PTM: Phosphorylated. The phosphorylation sites are at the C-terminal part of the protein.
DISEASE: Sera from patients with systemic lupus erythematosus (SLE) often contain antibodies that react with the normal cellular La protein as if this antigen was foreign.

Source of Antigen and Antibodies

Antigen	Human purified recombinant La/SS-B (408 aa, ~48 Kda, Sf9, his-tag) protein (protein accession # P05455
Ab Host/type	Rabbit, Polyclonal antiserum **(cat # SSB522-S)**
2-ab	**Goat Anti-rabbit IgG-HRP** cat # 20320 (AP, biotin, FITC conjugates also available)
-ve control IgG	# 20009-1, Rabbit (non-immune) IgG, purified, suitable for ELISA, Western, IHC as –ve control

Cat # SSB522-C
Human La/SS-B was expressed in Sf9 cells and his-tag proteins and purified (48 Kda, >95%). For Western blot +ve control (**Cat # SSB523-C**) is supplied in SDS-PAGE sample buffer (reduced). Load 10 ul/lane of **SSB523**-C for good visibility with rabbit antibody Cat # **SSB522**-S. Store at –20oC in suitable size aliquots. SDS may crystallize in cold conditions. It should redissolve by warming before taking it from the stock. It should be heated once prior to loading on gels. If the product has been stored for several weeks, then it may be preferable to add 5 ul of fresh 2x sample buffer per 10 ul of the **SSB523**-C solution prior to heating and loading on gels. This preparation is not biologically active. It is not suitable for ELISA or other applications where native protein is required. Do not freeze, thaw, or heat repeatedly

Form & Storage of Antibodies/Peptide Control

Unpurified antiserum
solution lyophilized powder contains 0.05% azide
Reconstitute powder in 100 ul PBS

Storage

Short-term: unopened, undiluted vials for less than a week at 4oC.
Long-term: at –20C or below in suitable aliquots after reconstitution. Do not freeze and thaw and store working, diluted solutions.

Stability: 6-12 months at –20oC or below.
Shipping: 4oC for solutions and room temp for powder.

Recommended Usage

Western Blotting (1:500-1:5K using ECL technique).

ELISA: Control antigen can be used to coat ELISA plates at 1 ug/ml and detected with antibodies (0.5-1 ug/ml for affinity pure).

Histochemistry & Immunofluorescence: Not tested. We recommend the use of 1;200-:1k diluted antiserum.

Specificity & Cross-reactivity

Anti-SS-B/La antiserum reacts with human SS-B/La with minimal reaction with other autoantigens. Antibody cross-reactivity in various species has not been studied. Recombinant purified human La/SS-B protein (#SSB522-C) is available as a control for Western.

General References: Chan EKL (1989) Nucl Acid Res. 17, 2233-2244; Cahmbers JC (1988) JBC 263, 18043-18051; Sturgess AD (1988) J. Immunol. 140, 3212-3218;

*This product is for In vitro research use only.

Related material available from ADI

SS-A and SS-B, Scl70, recombinant proteins and antibodies
SSB522-S-C 80312A

Alpha Diagnostic Intl Inc., 6203 Woodlake Center Dr, San Antonio, TX 78244, USA; **Email**: service@4adi.com
☎ (800) 786-5777; (210) 561-9515; **Fax**: (210) 561-9544; **Web Site**: www.4adi.com