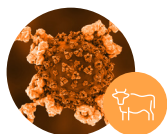


Product datasheet



ALA01 La(SSB) Native Antigen

Product name	La(SSB) antigen
Description	Purified native protein
Source material	Bovine Calf Thymus
Purity	>90% by SDS-PAGE

Antigen overview

Sjögren's syndrome (SS) is a common systemic autoimmune inflammatory disorder characterised by lymphocyte-mediated destruction of exocrine glands leading to diminished or absent glandular secretion¹. SS may present as a primary disease or in association with other systemic autoimmune diseases (referred to as secondary SS).

Autoantibodies to the La(SSB) antigen are present in the serum of 40 – 70% of patients with SS^{1,2}. The presence of anti-La(SSB) autoantibodies usually coincides with the presence of anti-Ro(SSA) autoantibodies², however the anti-La is more specific for SS than anti-Ro³.

Anti-La autoantibodies have also been reported to be present in other clinical conditions, most notably in the sera of mothers of infants with neonatal lupus syndrome², and in 45% of SLE patients².

La(SSB) antigen is found in both the nucleus and cytoplasm. It binds to nascent RNA polymerase III transcripts and has

important roles facilitating transcriptional termination, maturation of the RNA transcripts, and reinitiation of this enzyme³⁻⁶.

La(SSB) is a 46-48 kDa highly phosphorylated protein. At least 8 isoelectric forms (pI range 6 to 7) have been identified⁷. The amino acid sequences of both human and bovine La(SSB) antigen have been determined by cDNA cloning and sequencing^{8,9}. Comparison of the two amino acid sequences shows a total of 95% identity.

Three regions of the La molecule (amino acids 1-107, 111-242 and 346-408) are thought to contain the major epitopes reactive with human anti-La sera⁹. The broad cross-reactivity of patient sera with La(SSB) from diverse mammalian species indicates the presence of conserved epitopes⁸.

The use of bovine La(SSB) antigen for the detection of human anti-La(SSB) antibodies has been described^{10,11}.

Storage conditions & handling

- Store at -65°C or below
- Avoid repeated freezing and thawing
- Storage buffer contains 20% Glycerol as cryoprotectant
- Mix before use and keep on ice

Ordering information

ALA01-02 - La(SSB) antigen (native) - 0.20 mg

ALA01-10 - La(SSB) antigen (native) - 1.0 mg

Custom vial sizes available on request

Applications

Reactive in Western Blot and ELISA with anti-La(SSB) antibodies or anti-La(SSB) positive patient serum

Product profile

Fig 1 AROTEC La(SSB) Antigen Titration

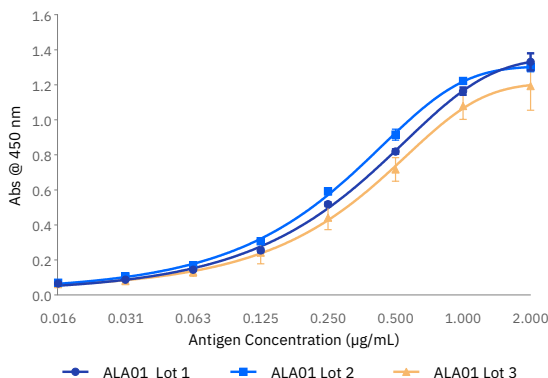


Fig 2

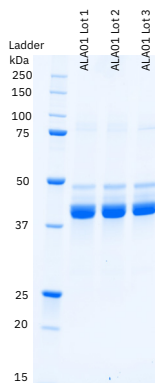


Fig 3

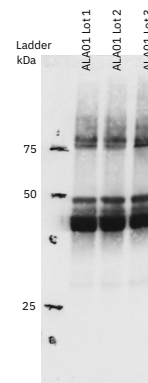


Fig.1. ELISA titration assay of ALA01 La(SSB) antigen using patient serum (1:800 dilution)

Fig.2. SDS-PAGE of ALA01 La(SSB) antigen; All lanes loaded with 1 µg protein concentration

Fig.3. Western Blot of ALA01 La(SSB) antigen with positive patient serum

References

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