



***E. coli* Single-stranded DNA Binding Protein (SSB)**

BACKGROUND

***E. coli* single-stranded DNA binding protein (SSB)** binds to single-stranded DNA with high specificity (1, 2). It is involved in DNA replication and recombination *in vivo*. The **SSB** gene was expressed as the recombinant protein in *E. coli* highly purified. The molecular mass is 18.9 kDa.

Applications:	1) Functional single-stranded DNA-binding protein for studying DNA replication and recombination 2) Enhancement of the specificity and yield of PCR
Size:	200 µg
Form:	5 mg/ml in 20mM Tris-HCl (pH 7.6), 200mM NaCl, 1mM dithiothreitol, 1mM EDTA, 50% glycerol
Quality:	Greater than 95% purity as determined by SDS-PAGE (CBB staining) The absence of endonucleases and exonucleases was confirmed.
Data Link:	Swiss-Prot P0AGE0
Storage:	-20°C

References:	1) Krauss, G. <i>et al.</i> (1981) "Escherichia coli single-strand deoxyribonucleic acid binding protein: Stability, specificity, and kinetics of complexes with oligonucleotides and deoxyribonucleic acid." <i>Biochemistry</i> 20 : 5346-5352 PMID: 7028102 2) Weiner, J.H. <i>et al.</i> (1975) "The deoxyribonucleic acid unwinding protein of Escherichia coli. Properties and functions in replication." <i>J. Biol. Chem.</i> 250 :1972-1980 PMID: 1090613
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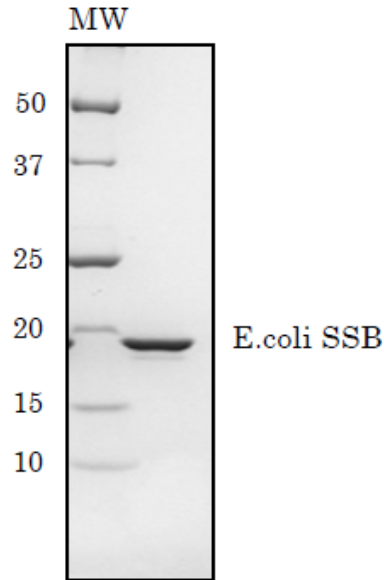


Fig.1 SDS-PAGE of *E. coli* SSB protein

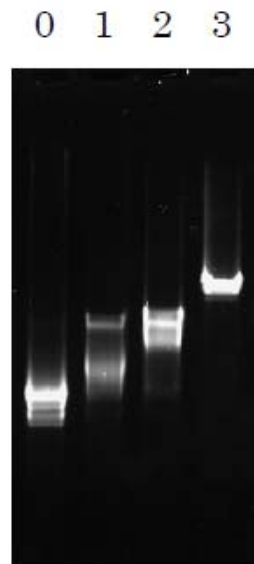


Fig.2 Binding activity to single-stranded DNA
0.02 $\mu\text{g}/\mu\text{l}$ of M13mp18ssDNA was incubated with 0 (lane0), 0.025 (lane1), 0.05 (lane2), and 0.1 (lane3) $\mu\text{g}/\mu\text{l}$ of SSB at 37°C for 30 min. and then 10 μl aliquot was subjected to electrophoresis in agarose.

Related Products

BAM-02-042-5-EX *E. coli* Single-stranded DNA Binding Protein (SSB) 1mg (5 x 200 μg)

For research use only. Not for clinical diagnosis.

Manufactured by BioAcademia, Inc.



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