



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

# 02-042 200 ug # 02-042-5 1 mg

*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* then 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

## **Specification**

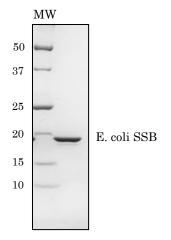
Quality: Greater than 95% purity as determined by SDS-PAGE (CBB staining). The absence of endonucleases and exonucleases was confirmed.

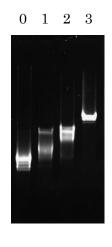
Form: 5 mg/ml in 20mM Tris-HCl (pH 7.6), 200mM NaCl, 1mM dithiothreitol, 1mM EDTA, 50% glycerol Storage: -20°C

Data Link: UniProtKB/Swiss-Prot POAGEO (SSB\_ECOLI)

## References:

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





0.02 ug/ul of M13mp18ssDNA was incubated with 0 (lane 0), 0.025 (lane 1), 0.05 (lane 2), and 0.1 (lane 3) ug/ul of SSB at 37°C for 30 min. and then 10ul aliquot was subjected to electrophoresis in agarose.

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

Fig. 2 Binding activity to single-stranded DNA

Related product: #02-040 T4 SSB protein, #02-044 Taq SSB

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