

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

02-042 200 µg, 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* 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

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

Storage: -20 C

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](#)

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, J. H. *et al.* (1975) "The deoxyribonucleic acid unwinding protein of Escherichia coli. Properties and functions in replication." *J. Biol. Chem.* **250**: 1972-1980 [PMID: 1090613](#)

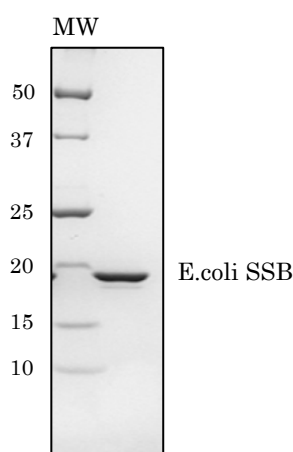
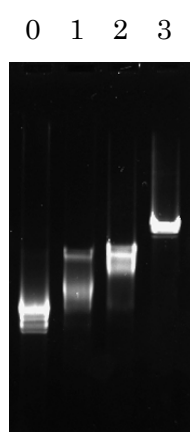


Fig.1 SDS-PAGE of *E. coli* SSB protein



0.02 µg/µl of M13mp18ssDNA was incubated with 0(lane0), 0.025(lane1), 0.05(lane2), and 0.1(lane3) µg/µl of SSB at 37 for 30 min. and then 10µl aliquot was subjected to electrophoresis in agarose.

Fig.2 Binding activity to single-stranded DNA

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