

## Recombinant E.coli Single-Stranded DNA Binding Protein

Cat. No. ssb-50E    Lot. No. (See product label)

### SPECIFICATION

|                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
|-------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Product Overview</b> | A recombinant E. coli strain carrying the E.coli SSB gene.                                                                                                                                                                                                                                                                                                                                                                                                                 |
| <b>Species</b>          | E.coli                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| <b>Source</b>           | E.coli                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| <b>Description</b>      | Single-Stranded DNA Binding Protein (SSB) preferentially binds single-stranded DNA, forming a tetramer of four identical 18.9 kDa subunits which protects 8-16 nucleotides, while not binding well to double-stranded DNA. In nature, SSB participates in DNA replication, recombination, and repair functions. In vitro, SSB has been found to stimulate certain DNA polymerase-mediated reactions by relaxing DNA secondary structure and enhancing enzyme processivity. |
| <b>Molecular Mass</b>   | 18.975 Daltons                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| <b>Purity</b>           | >99% by SDS-PAGE                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| <b>Storage</b>          | -25 to -15°C                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| <b>Concentration</b>    | 2.75 mg/ml                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| <b>Storage Buffer</b>   | 50mM Tris-HCL, 200 mM NaCl, 1mM DTT, 0.1mM EDTA, 50% glycerol pH 7.5 @ 25°C.                                                                                                                                                                                                                                                                                                                                                                                               |

### GENE INFORMATION

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|                 |                                                                                       |
|-----------------|---------------------------------------------------------------------------------------|
| Gene Name       | ssb single-stranded DNA-binding protein [ Escherichia coli str. K-12 substr. MG1655 ] |
| Official Symbol | ssb                                                                                   |
| Synonyms        | ssb; single-stranded DNA-binding protein; NP_418483.1; ssDNA-binding protein          |
| Gene ID         | 948570                                                                                |
| Protein Refseq  | NP_418483                                                                             |
| Pathway         | DNA replication; Homologous recombination; Mismatch repair                            |

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