

Datasheet for ABIN2452175

SSB Protein



2

Publications



Go to Product page

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Application Notes:

| Quantity: | 200 μg | |
|----------------------|--|--|
| Target: | SSB | |
| Origin: | E. coli | |
| Source: | Escherichia coli (E. coli) | |
| Protein Type: | Native | |
| Biological Activity: | Active | |
| Application: | Functional Studies (Func) | |
| Product Details | | |
| Purity: | > 95 % purity as determined by SDS-PAGE (CBB staining) | |
| Target Details | | |
| Target: | SSB | |
| Abstract: | SSB Products | |
| Background: | E.coli single-stranded DNA binding protein (SSB) binds to single-stranded DNA with high specificity. 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. | |
| UniProt: | P0AGE0 | |
| Application Details | | |

1. Functional single-stranded DNA-binding protein for studying DNA replication and

Application Details

| Application Details | | | |
|---------------------|--|--|--|
| | recombination | | |
| | 2. Enhancement of the specificity and yield of PCR | | |
| Comment: | The absence of endonucleases and exonucleases was confirmed. | | |
| Restrictions: | For Research Use only | | |
| Handling | | | |
| Format: | Liquid | | |
| Concentration: | 5 mg/mL | | |
| Buffer: | 20 mM Tris-HCl (pH 7.6), 200 mM NaCl, 1 mM dithiothreitol, 1 mM EDTA, 50 % glycerol | | |
| Preservative: | Dithiothreitol (DTT) | | |
| Precaution of Use: | This product contains Dithiothreitol (DTT): a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only. | | |
| Storage: | -20 °C | | |
| Publications | | | |
| Product cited in: | Krauss, Sindermann, Schomburg, Maass: "Escherichia coli single-strand deoxyribonucleic acid | | |
| | binding protein: stability, specificity, and kinetics of complexes with oligonucleotides and | | |
| | deoxyribonucleic acid." in: Biochemistry , Vol. 20, Issue 18, pp. 5346-52, (1982) (PubMed). | | |
| | Weiner, Bertsch, Kornberg: "The deoxyribonucleic acid unwinding protein of Escherichia coli. | | |

Weiner, Bertsch, Kornberg: "The deoxyribonucleic acid unwinding protein of Escherichia coli. Properties and functions in replication." in: **The Journal of biological chemistry**, Vol. 250, Issue 6, pp. 1972-80, (1975) (PubMed).

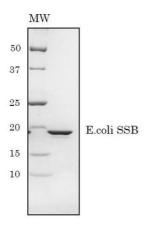
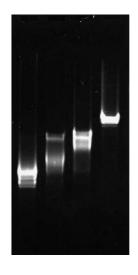


Fig.1 SDS-PAGE of E.coli SSB protein



Polymerase Chain Reaction

Image 2.

Western Blotting

Image 1.

0 1 2 3

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 $^{\circ}$ C for 30 min. and then 10ul aliquot was subjected to electrophoresis in agarose.

Polymerase Chain Reaction

Image 3.