**Thermus aquaticus** Single-stranded DNA Binding Protein (SSB)

02-044 100ug

*Thermus aquaticus* derived single-stranded DNA binding protein (SSB) is a thermostable protein which binds to single-stranded DNA with high specificity but does not bind well to double-stranded DNA (1). It plays important roles in DNA replication and recombination (2). *Thermus aquaticus* SSB gene was expressed in *E. Coli* in large quantities and the protein was highly purified. MW is 30.0 kDa, same as that of the natural protein.

**Applications:**
Stabilizes single-stranded DNA in DNA replication, repair, and recombination

**Storage conditions:**
50mM Tris-HCl (pH 8.0), 200mM NaCl, 0.1mM dithiothreitol, 0.5mM EDTA, 50% glycerol
Store at -20°C

**Activity:**
Single-stranded DNA binding activity was confirmed (Fig.2).

**Concentration:**
1.0 mg/ml

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

**Data Link:** UniProtKB/Swiss-Prot Q9KH06 (SSB_THEAQ)

**References:**

![Fig1.SDS-PAGE of Thermus aquaticus SSB](image1.png)

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.

![Thermus aquaticus SSB](image2.png)

Related products: #02-040 T4 SSB, #02-042 E.coli SSB