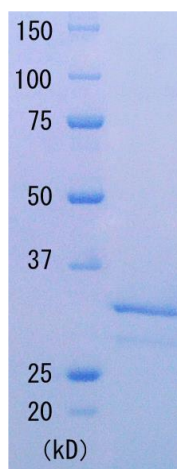


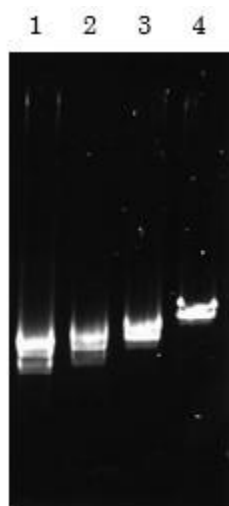
### **Thermus aquaticus Single-stranded DNA Binding Protein (SSB)**

<b>Product code</b>	02-044
<b>Size</b>	100 µg
<b>Storage</b>	-20°C
<b>Concentration</b>	1.0 mg/ml
<b>Buffer</b>	50mM Tris-HCl (pH 8.0), 200mM NaCl, 0.1mM dithiothreitol, 0.5mM EDTA, 50% glycerol
<b>Quality Assurance</b>	Greater than 95% of protein determined by SDS-PAGE (CBB staining) The absence of endonucleases and exonucleases was confirmed.
<b>Immunogen</b>	N/A
<b>Isotype</b>	N/A
<b>Activity</b>	Single-stranded DNA binding activity was confirmed (Fig.2).
<b>Validation</b>	N/A
<b>Application</b>	1. Stabilizes single-stranded DNA in DNA replication, repair, and recombination
<b>Background</b>	<i>Thermus aquaticus</i> 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). <i>Thermus aquaticus</i> SSB gene was expressed in <i>E.Coli</i> in large quantities and the protein was highly purified. MW is 30.0 kDa, same as that of the natural protein.
<b>Data Link</b>	UniProtKB/Swiss-Prot <a href="#">Q9KH06</a> (SSB_THEAQ)
Please note: All products are FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES. NOT FOR MILITARY USE.	

**Data Images:** 02-044 *Thermus aquaticus* Single-stranded DNA Binding Protein (SSB)



**Fig.1 SDS-PAGE of *Thermus aquaticus***



**Fig.2 Binding activity to single-stranded DNA**

0.02 ug/ul of M13mp18ssDNA was incubated with 0 (lane 1), 0.025 (lane 2), 0.05 (lane 3), and 0.1(lane 4) ug/ul of SSB at 37°C for 30 min and then 10ul aliquot was subjected to electrophoresis in agarose.