

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

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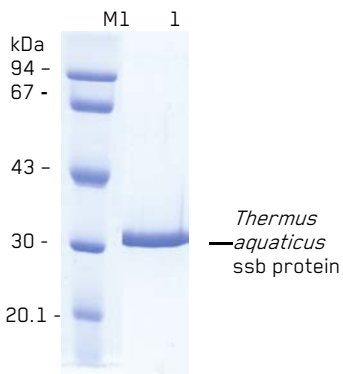
Thermostable single-stranded specific DNA binding protein from *Thermus aquaticus*, suitable for high temperature DNA manipulations.

Cat. No.	Package Size
E4300-01	50 µg
E4300-02	250 µg

Description:

- Thermostable single-stranded specific DNA binding protein (1).
- Helix destabilizing protein (1).
- Reduces formation of problematic secondary DNA structures.
- Prevents degradation of ssDNA by nucleases.
- Ultrapure recombinant protein.
- Prevents inhibition of PCR by template DNA contaminants (2).
- Improves the efficiency of DNA amplification by *Taq* DNA Polymerase (3,4,5,6).
- Improves the specificity and selectivity of multiplex PCR (7).
- Aids PCR of difficult and GC-rich templates.
- Stabilizes single-stranded regions of DNA for site-specific mutagenesis.
- Aids completion of restriction enzyme digestion.
- **Working range in PCR reactions: Use 0.01-0.3 µg Taq SSB in a 50 µl reaction volume.**

Storage Conditions: Store at -20°C



SDS/PAGE of purified *Thermus aquaticus* ssb protein.

Lane M1: molecular weight marker.

Lane 1: purified *Thermus aquaticus* ssb protein.

Storage Buffer:

10 mM Tris-HCl (pH 7.5 at 22°C), 300 mM NaCl, 5 mM β-mercaptoethanol, 0.05% Igepal, 0.1 mM EDTA and 50% (v/v) glycerol.

Quality Control:

All preparations are assayed for contaminating endonuclease, 3'- and 5'-exonuclease activities. Typical preparations are greater than 95% pure, as judged by SDS polyacrylamide gel electrophoresis.

References:

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5. Rapley, Mol. Biotech. 2 (1994) 295-298.
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