Certificate of Analysis

T4 gp32 ssDNA-binding protein

Product Number:	3200
Lot Number:	200505PB
Concentration:	10 mg/mL
Assay Date:	01/23
Expiration Date:	01/25
Storage Temperature:	-20 °C
Storage Buffer:	50% glycerol, 50 mM Tris-HCl, 50 mM KCl, 1 mM DTT, 0.1 mM EDTA, 0.1% Tween-20, pH 7.5
Specification Version:	DM-T4gp32-v1.0

Warning: This product is distributed for laboratory research use only. **Caution: Not for diagnostic use.** The safety and efficacy of this product in diagnostic or other clinical uses has not been established.

Single-Stranded DNA Binding: 3 µg of single-stranded M13 DNA is incubated with 30 µg of T4 gp32 for 2 hours at 37 °C and assessed for electrophoretic mobility shift by agarose gel electrophoresis.
Specification: Mobility shift of >95% of starting material

Concentration: Measured by UV absorption at 280 nm, ± 10%.

Protein Purity: Purified to > 95% homogeneity as determined by SDS-PAGE analysis using Coomassie Blue detection.

DNase Contamination:
1) A fluorescent probe-based detection kit is used to test for DNase contamination.
Specification: Below the lower limit of detection ($1x10^{-4}$ U DNase I activity) in 1 µg for 25 minutes at 37 °C.
2) 3 µg of λ DNA HindIII digest is incubated with 30 µg of T4 gp32 for 2 hours at 37 °C and the absence of degradation is confirmed by agarose gel electrophoresis.

RNase Contamination: A fluorescent probe-based detection kit is used to test for RNase contamination.
Specification: Below the lower limit of detection (2 pg RNase A activity) in 1 µg for 25 minutes at 37 °C.

DNA Contamination: A nucleic acid stain-based kit is used to quantify contaminating DNA.
Specification: <0.05 ng/µg of T4 gp32

Product meets all specifications.

SIGNATURE: 

Date: Jan 18, 2023