

Catalog #:	Package Size	Concentration
3512	50 µl (100 µg)	5 µg/µl
3515	250 µl (500 µg)	5 µg/µl

### Description

T4 gp32 is a single-stranded DNA binding protein required for T4 DNA replication, recombination, and repair (1, 2). It improves the efficiency of reverse transcriptase (RT) during RT-PCR (3), enhances T4 DNA polymerase activity (4), as well as increases the yield of PCR products (5).

### Protein Purity

The physical purity of this enzyme is ≥98% as assessed by SDS-PAGE with Coomassie® blue staining (Fig. 1).

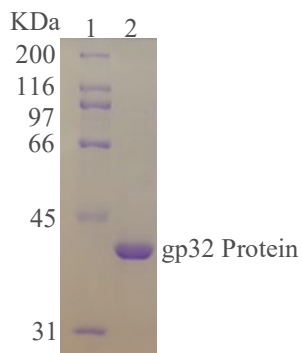


Fig. 1: Lane 1, Protein marker and lane 2, gp32 Protein

### Product Source

*E. coli* BL21 (DE3) strain expressing T4 gp32 gene.

### Product Includes

- T4 gp32 protein
- 10X gp32 reaction buffer

### 1x GP 32 reaction buffer composition

20 mM Tris-acetate  
 100 mM Potassium acetate  
 10 mM Magnesium acetate  
 1 mM DTT  
 pH 7.8 @ 25°C

### Storage Buffer

50 mM Tris-HCl  
 50 mM KCl  
 1 mM DTT  
 0.1 mM EDTA  
 50% Glycerol  
 pH 7.5 @ 25°C

### Storage Temperature

-20°C

### Heat Inactivation

65°C for 20 min

### Quality Control assays

T4 gp32 protein is free from detectable nuclease activities.

### References

1. Chase, J. W. and Williams, K. R. (1986) Ann. Rev. Biochem. 55, 103-136
2. Sinha, N. K. and Snustad, D. P. (1971) J. Mol. Biol. 62, 267-271.
3. Baugh, L.R. et al. (2001). Nucl. Acids Res. 29, e29.
4. Topal, M.D. and Sinha, N.K. (1983). J. Biol. Chem. 258, 12274-12279.
5. Schwartz, K. et al. (1990). Nucl. Acids Res. 18, 1079.