

T4 Gene 32 Protein (T4gp32)

Product Description:

T4 gene 32 protein (T4 GP32 protein) is a single-stranded DNA (ssDNA)-binding protein required for T4 phage DNA replication and repair. It cooperatively binds to and stabilizes the transiently formed ssDNA region and plays an important role in the DNA replication of T4 bacteriophage. The protein is also widely used to identify single-stranded and double-stranded regions of DNA in electron microscopy studies. Recent reports suggest that T4 gene 32 protein can improve restriction enzyme digestion, increase the yield and efficiency of reverse transcription (RT) during RT-PCR, enhance T4 DNA polymerase activity, and increase the yield and specificity of PCR products.

This product is mainly used to increase the yield and extension of reverse transcription, and to increase the yield and specificity of the target fragment during PCR of soil samples, as well as to stabilize and label ssDNA structure.

Product parameters

Product name	T4 Gene 32 Protein
Molecular weight	~33,506 Da
Source	An E. coli strain carrying a plasmid that overexpresses the gene 32 protein of T4 phage
Concentration	10 mg/mL
Reaction condition	37°C (Optimal reaction temperature)
Storage buffer	20 mM Tris-HCl, 100 mM NaCl, 0.5 mM DTT, 1 mM EDTA, 50% Glycerol (pH 8, 25°C)
Storage condition	-20°C
Storage time	2 years
Conditions of Carriage	Dry ice

Precautions

- 1. Thermal deactivation conditions are 65°C for 20 min.
- 2. This product is for scientific research purposes only.

