T4 Gene 32 Protein (10 mg/mL)

Cat. No. : RK20546

Product components

Components	Component number	Size-1 100 μg	Size-2 500 μg
T4 Gene 32 Protein (10 mg/mL)	RM20532	10 μL	50 μL

Product Description

T4 Gene 32 Protein (10 mg/mL), also known as T4 gp32 protein, is a single stranded specific DNA binding protein. The native Gene 32 Protein from bacteriophage T4 (T4gp32) is a single-stranded DNA binding protein that is required for T4 DNA replication, recombination and repair. T4 Gene 32 protein can increase the yield of long PCR products when the reaction contains proteins ranging from 0.5 to 1.0 nmol. The T4 Gene 32 protein can increase the production of PCR products, reducing the inhibitory effect of humic acid. Meanwhile, the protein can promote the digestion reaction of restriction endonucleases, reverse transcription efficiency in RT-PCR, and enhance the activity of T4 DNA polymerase.

Source

The T4 Gene 32 gene was recombined, expressed, and purified in *Escherichia coli*.

Applications

PCR optimization

Stimulate in vitro DNA synthesis

Stability of DNA or RNA single stranded regions

Site specific mutation experiment (using T4 DNA polymerase and T4 DNA ligase)

Help limit enzyme digestion completion

q-PCR

Recombinase polymerase amplification, RPA

Store

-20℃

Reaction conditions

Within the demand response buffer system, at 37℃.

Storage Buffer

20 mM Tris-HCl, 100 mM NaCl, 0.5 mM DTT, 1 mM EDTA, 50% Glycerol, pH 8.0 @ 25℃

Inhibition and Inactivation

Inactivated by heating at 65 ℃ for 20 min