



T4 UvsY Protein

Product Number: RPA002

Shipping and Storage

Ice bag transportation. Store at -20°C, valid for 2 years, to avoid repeated freeze-thaw cycles.

Components

Component	RPA002-1	RPA002-2
T4 UvsY Protein (2µg/µL)	100µg	500µg

Description

T4 UvsY protein is a recombinant regulatory protein derived from bacteriophage T4, which plays a promoting role in the homologous recombination process of T4 UvsX Recombinase. The T4 UvsY protein stimulates the enzyme activity of T4 UvsX Recombinase by promoting the filament assembly of T4 UvsX Recombinase and single stranded DNA (ssDNA), helping to replace the T4 gp32 Protein bound to ssDNA. The molecular weight of T4 UvsY protein is ~16 KDa, which can enhance the DNA dependent ATPase activity of T4 UvsX Recombinase, reduce the minimum concentration required for its activity, and promote strand displacement. T4 UvsY Protein can be used for recombinant polymerase amplification (RPA). RPA technology does not require thermal denaturation pre-treatment of the template and can be performed at a constant temperature (37-42°C) with shorter amplification time. Compared with other PCR technologies, RPA reaction requires the following components: recombinant enzyme T4 UvsX Recombinase, recombinant enzyme loading factor T4 UvsY Protein, ssDNA binding protein T4 gp32 Protein, and DNA polymerase (such as Bsu DNA Polymerase, Large Fragment).

Source	Expressed by Escherichia coli, the UvsY gene of the T4 bacteriophage is expressed.
Molecular weight	~16 KDa
Purity	SDS-PAGE detection ≥ 95%, does not contain DNA endonucleases and exonucleases, and does not contain ribonucleases.
Enzyme preservation solution	50 mM Tris HCl, 150 mM KCl, 1 mM DTT, 0.1 mM EDTA, 50% Glycerol, pH 7.5, 25°C.
Deactivation or inhibition	Incubation at 60°C for 10 minutes can inactivate T4 UvsY Protein.

Application

Mainly used for isothermal amplification of RPA recombinase polymerase amplification technology.

Note

1. This product is only for scientific research purposes;
2. For your safety and health, please wear laboratory clothes and disposable gloves when operating. 本产品仅做科研用途;