



T4 UvsX Recombinase

Product Number: RPA001

Shipping and Storage

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

Components

Component	RPA001-1	RPA001-2
T4 UvsX Recombinase (2µg/µL)	100µg	500µg

Description

The T4 UvsX Recombinase is derived from the T4 bacteriophage and is a homolog of the RecA/Rad51 family. It plays an important role in the repair of double stranded DNA breaks and the reactivation of replication forks. T4 UvsX recombinase can combine with other DNA binding proteins or cofactors to form nucleic acid protein complexes with single stranded DNA, and polymerize on them to form helical filaments. The latter can bind to double stranded DNA (dsDNA) and initiate chain displacement reactions. T4 UvsX Recombinase can be used for Recombinase 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 expressed gene is the uvsX gene of T4 bacteriophage.
Molecular weight	~45 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, 50 mM NaCl, 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 UvsX Recombinase.

Application

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

Note

1. This product is only for scientific research purposes;
2. Suggest separate packaging and storage to avoid repeated freeze-thaw cycles.
3. The product can react at room temperature, and the entire process of preparing the reaction system needs to be carried out on ice.
4. For your safety and health, please wear laboratory clothes and disposable gloves when operating.