

## ORDERING INFORMATION

| CAT. No.  | SIZE   | PACKAGE CONTENT   |
|-----------|--------|---|
| BR1500301 | 100 µg | 50 µl LYO-ready T4 UvsY Protein, 2 mg/ml<br>1.5 ml 10X Reaction Buffer I  |
| BR1500302 | 500 µg | 250 µl LYO-ready T4 UvsY Protein, 2 mg/ml<br>1.5 ml 10X Reaction Buffer I |

## DESCRIPTION

biotechrabbit™ LYO-ready T4 UvsY Protein plays a crucial part within the DNA recombination and the repair apparatus of the T4 bacteriophage. Originating from the T4 bacteriophage, this 16 kDa protein plays a fundamental role in expediting homologous recombination processes and enhancing the effectiveness of the DNA repair, as well as promoting the loading of the T4 presynaptic filament onto single-stranded DNA (ssDNA). Through its interactions with pivotal recombination proteins, such as T4 and/or T6 UvsX Recombinase, T4 UvsY emerges as an indispensable element for upholding genome integrity and enabling genetic exchange. This enzyme efficiently promotes the UvsX-catalyzed strand invasion by getting involved into ssDNA binding protein (SSB) complexes. The enzyme assists the release of the SSB and uplifts the binding of UvsX. This protein is provided in a storage buffer containing 0% glycerol, making it suitable for further use in lyophilization.

## APPLICATIONS

- Recombinase Polymerase Amplification (RPA)
- Mediation and stimulation of DNA dependent ATPase activity of UvsX Recombinase
- Promotion of strand exchange
- Facilitating the release of single stranded DNA - gp32 complex
- DNA isothermal amplification (e.g., RPA)

## REAGENTS SUPPLIED WITH THE ENZYME

10X Reaction Buffer I (K00632)

## STORAGE

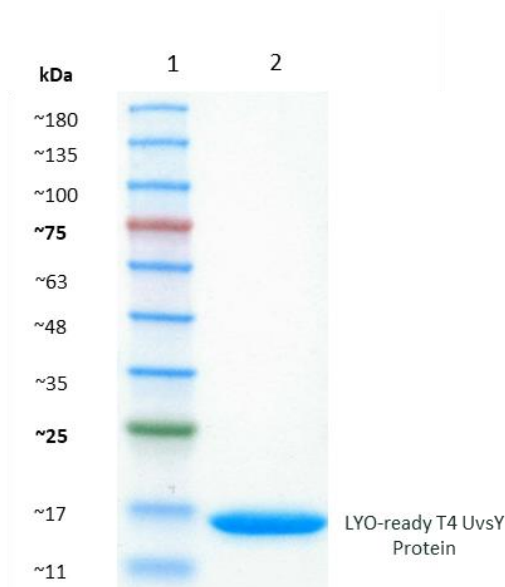
Store at -20 °C until expiry date.

## STORAGE BUFFER COMPOSITION

50 mM Tris-HCl, 500 mM KCl, 0.1 mM EDTA, 1 mM DTT - pH 8.0 at 25 °C

### PURITY

SDS-PAGE followed by Coomassie® blue staining confirms the purity of the protein (Fig. 1). The physical purity of T4 UvsY Protein is  $\geq 98\%$



### RELATED PRODUCTS

BR15004XX:

LYO-ready RB69 Gene 32 Protein, 10 mg/ml

BR15002XX:

LYO-ready T6 UvsX DNA Recombinase, 5 mg/ml

BR15005XX:

LYO-ready T4 Gene 32 Protein, 10 mg/ml

BR15001XX:

LYO-ready Exonuclease III, 100 U/μl

### SAFETY INSTRUCTIONS

For safety instructions please see Safety Data Sheets (SDS)  
Sicherheitshinweise finden Sie in den Sicherheitsdatenblättern (SDB) unter

<http://www.biotechrabbit.com/support/documentation.html>

### USEFUL HINTS

- Visit Applications at [www.biotechrabbit.com](http://www.biotechrabbit.com) for more products and product selection guides.
- Most biotechrabbit products are available in custom formulations and bulk amounts.
- In case any customization is required, please contact biotechrabbit via [oem@biotechrabbit.com](mailto:oem@biotechrabbit.com).

### CONTACT BIOTECHRABBIT

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### LIMITATION OF USE

For Research Use Only. biotechrabbit does not assume any warranty regarding the design, merchantability or fitness for a particular purpose of the product, especially, but not limited to, for any in vitro diagnostic or other usages of the products. It is the sole responsibility of the customer to obtain the required approvals from the competent authorities. The product is not suitable for administration to humans or animals.

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valid from 09.09.2024