

## RecA Protein, *E.coli*

**CATALOG NO.:** M1231-200  
**AMOUNT:** 200 µg (100 µl)  
**CONCENTRATION:** 2.0 mg/ml  
**FORM:** Liquid  
**SOURCE:** Recombinant *E.coli*

**KIT COMPONENTS:**

Components	Volume	Part No.
RecA, <i>E.coli</i> (2.0 mg/ml)	100 µl (200 µg)	M1231-200-1
10X RecA, <i>E.coli</i> Reaction Buffer	1.0 ml	M1231-200-2

**DESCRIPTION:**

RecA from *E.coli* is a DNA-binding protein that is involved in homologous recombination in an ATP-dependent process. RecA binds to single-stranded DNA forming a nucleoprotein complex and promotes the strand exchange of single-strand DNA fragments with homologous duplex DNA. RecA also plays a role in post-replicative DNA repair mechanisms and in DNA repair and UV-induced mutagenesis. RecA protein is commonly used to study the molecular mechanisms involved in homologous recombination.

**APPLICATIONS:**

- Displacement loop mutagenesis
- Targeted DNA cleavage
- Visualization of DNA with electron microscopy
- Library screening with RecA coated probes

**EZYME UNIT DEFINITION:**

One unit is defined as the amount of enzyme which will completely degrade 1µg of pBR322 DNA in 10 mins at 37°C. Complete degradation is defined as the reduction of the majority of DNA fragments

**ENZYME STORAGE BUFFER:** 10 mM Tris-HCl (pH 7.5), 0.1 mM EDTA, 1 mM DTT, and 50% (v/v) Glycerol

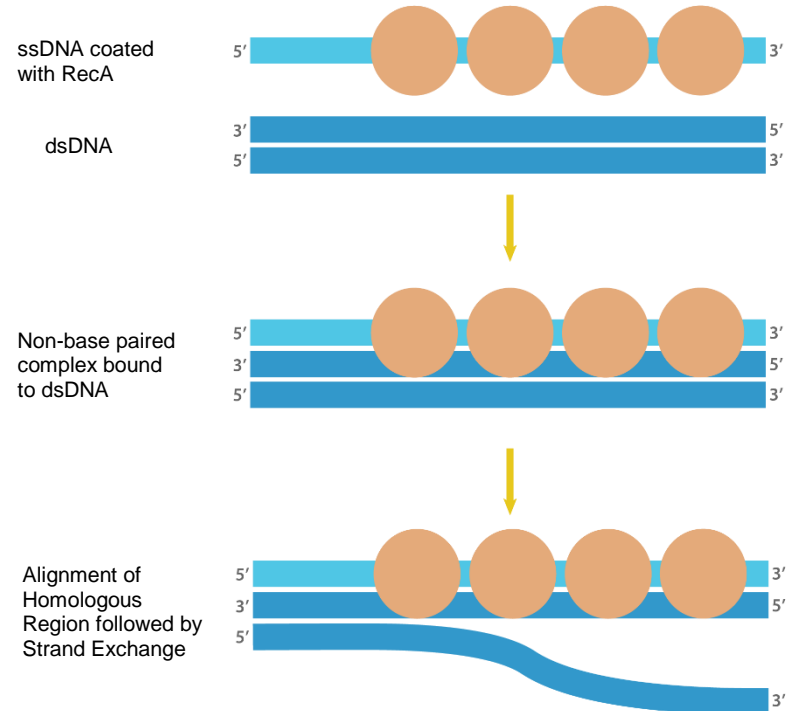
**STORAGE CONDITIONS:**

Store at -20°C. Avoid repeated freeze-thaw cycles of all components to retain maximum performance. All components are stable for one year from the date of shipping when stored and handled properly.

**10X RECA, E. COLI REACTION BUFFER COMPONENTS:** 700 mM Tris-HCl, 100 mM MgCl<sub>2</sub>, 50 mM DTT pH 7.5.

**REACTION CONDITIONS:** Usage concentration 2 mg/ml. *Note: Triple helix formation requires ATP (not provided).*

**HEAT INACTIVATION:** 65°C for 20 minutes



**RELATED PRODUCTS:**

- T4 Gene 32 Protein (Cat# M1232-100)

**FOR RESEARCH USE ONLY! Not to be used on humans.**