



Rec A Protein

(*Escherichia coli*)

Cat. No.	size
E1370-01	0.2 mg
E1370-02	1 mg

Storage Conditions:

Store at -20°C.

References:

1. Clark, A.J. and Margulies, A.D. (1965) *Proc. Natl. Acad. Sci. U.S.A.* 53, 451-459.
2. Radding, C.M. (1978) *Annu. Rev. Biochem.* 47, 847-880.
3. Koob, M., Burkiewicz, A., Kur, J. and Szybalski, W. (1992) *Nucleic Acids Res.* 20, 5831-5836.
4. Krasnow, M. A. et al. (1983) *Nature* 304, 559.

Bacterial recombination protein that enhances interaction and exchange of homologous DNA strands.

Description:

- A 37.8 kDa protein encoded by the *recA* gene of *E. coli*.
- Regulates repair mechanisms and repairs DNA (1, 2).
- Involved in DNA renaturation and rare cleavage of genomic DNA.
- Binds cooperatively and stoichiometrically to single-stranded DNA.
- Ultrapure recombinant protein.
- In presence of ATP- γ -S, locates and pairs a single-stranded DNA sequence to its homologous double-stranded DNA.
- Cleaves large fragments of DNA (RARE-Rec A Assisted Restriction Endonuclease) (3).
- Enhances contrast of electron micrography when DNA is coated with Rec A Protein (4).

Storage Buffer:

20 mM Tris-HCl (pH 7.5 at 22°C), 1 mM dithiothreitol, 0.1 mM EDTA and 50% (v/v) glycerol.

Quality Control:

All preparations are assayed for endonuclease and nonspecific single- and double-stranded DNase activities. Typically preparations are greater than 95% pure as judged by SDS polyacrylamide gel electrophoresis.