

## Recombinant E.coli RecA

recA-57E E.coli

Lot. No. (See product label)

### Specification

#### Product Overview

A recombinant E. coli strain overexpressing E. coli recA from a plasmid.

#### Description

RecA functions in DNA recombination and DNA repair. RecA binds to single stranded DNA, resulting in the polymerization of RecA into a nucleoprotein complex. This complex can align with complementary double stranded DNA, resulting in RecA catalysis of DNA strand exchange. RecA DNA binding is stimulated by ATP hydrolysis or non-hydrolyzable ATP analogs. The RecA-ATP-single stranded DNA complex also can function as a coprotease factor in the proteolytic cleavage of LexA, UmuD and certain bacteriophage proteins. RecA complexed with site-specific oligonucleotides have been used to target and specifically cleave large DNA fragments.

#### Source

E. coli

#### Species

E. coli

#### Molecular Mass

37,973 Daltons

#### Purity

>95% by SDS-PAGE

#### Unit Definition

Sold by mass of pure protein determined at OD280 (A280 = 0.516 at 1 mg/mL, 1cm)..

#### Storage

-25 to -15°C

#### Concentration

2.0 mg/mL

#### Storage Buffer

Supplied in: 10mM Tris-HCl, 1mM DTT. 0.1 mM EDTA 50% glycerol pH 7.5 @ 25°C. Supplied with: 10X RecA Reaction Buffer: 700mM Tris-HCl, 100mM MgCl<sub>2</sub>, 50mM DTT pH 7.6 @ 25°C.

### Gene Information

#### Gene Name

[recA](#)?DNA recombination and repair protein; ssDNA-dependent ATPase; synaptase; ssDNA and dsDNA binding protein; ATP-dependent homologous DNA strand exchanger; recombinase A; LexA autocleavage cofactor [Escherichia coli str. K-12 substr. MG1655?]

#### Official Symbol

recA

#### Synonyms

recA; DNA recombination and repair protein; ssDNA-dependent ATPase; synaptase; ssDNA and dsDNA binding protein; ATP-dependent homologous DNA strand exchanger; recombinase A; LexA autocleavage cofactor; NP\_417179.1; DNA strand exchange and renaturation, DNA-dependent ATPase, DNA- and ATP-dependent coprotease

#### Gene ID

[947170](#)

#### Protein Refseq

[NP\\_417179](#)

#### Pathway

Homologous recombination

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Function

peptidase activity

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