

***E. coli* RecQ DNA Helicase, functional**

01-003 20 µg, 01-004 100 µg

Storage: Sent at 4°C or at -20°C and upon arrival, centrifuge briefly and store at -20°C or -80°C for longer period

Product: Recombinant full-length *E. coli* RecQ protein. Highly purified (≥95%)

Applications

- 1) DNA dependent ATPase
- 2) DNA helicase specific for various form of DNA structure like branched form and fork.

Form: 0.2~0.5 mg /ml in 20 mM Tris-HCl (pH 7.5), 1 mM EDTA, 50 mM KCl, 1 mM DTT, 50% glycerol,

Purity: Over 90% by SDS-PAGE (CBB staining)

Biochemical activities: Unwinding duplex DNA, dependent on ATP. DNA-dependent ATPase (Ref.2).

Background: *E. coli* RecQ helicase contributes to the genomic stability as the prototype of RecQ family DNA helicases, mutations of which genes are associated with premature aging and cancer susceptibility, known as Bloom's and Werner's syndromes (1).

Data Link UniProtKB/Swiss-Prot [P15043](#) (RECQ_ECOLI)

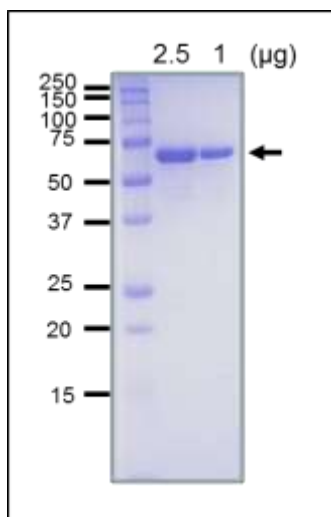


Figure. SDS-PAGE analysis of the purified RecQ protein

References: This product was used in Ref 2

1. Hickson I "RecQ helicases: caretakers of the genome." *Nat. Rev. Cancer* **3**:169-78 (2003)

Review PMID: [12612652](#)

2. Hishida T *et al* "Role of the Escherichia coli RecQ DNA helicase in SOS signaling and genome stabilization at stalled replication forks." *Genes Dev* **18**:1886-1897 (2004) PMID: [15289460](#)