



E. coli RecQ DNA Helicase, functional

Cat.# 01-003, Size: 20 µg; Cat.# 01-004, Size: 100 µg

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).

Specifications:

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

Form: 20 mM Tris-HCl (pH 7.5), 1 mM EDTA, 50 mM KCl, 1 mM DTT, 10% glycerol,

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

Protein concentration: 0.5 mg/ml as measured by BCA method

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

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

period

Applications

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

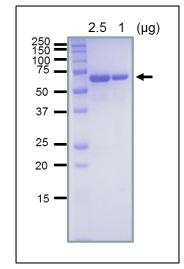


Figure. SDS-PAGE analysis of the purified RecQ protein

Data Link UniProtKB/Swiss-Prot P15043 (RECQ_ECOLI)

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. HishidaT *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: <u>15289460</u>.

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