

Anti-E. coli DNA Polymerase1 Antibody, Rabbit Antiserum

61-012 100 µl

E. coli DNA polymerase 1 (928 aa; 103 kDa) is encoded by polA gene and involved in DNA replication and repair. In addition to polymerase activity, this DNA polymerase exhibits 3' to 5' and 5' to 3' exonuclease activity. It is able to utilize nicked circular duplex DNA as a template and can unwind the parental DNA strand from its template.

Applications

1. Western blotting (1/1,000 – 1/5,000 dilution)
2. Immunoprecipitation is assay dependent

Specification

Immunogen: Full-size recombinant E. coli DNA polymerase 1.

Reactivity: E. coli DNA polymerase 1. Not tested in other species

Form: Antiserum added with sodium azide 0.05%

Storage: Shipped at 4°C or at -20°C. Upon arrival, spin-down and store at -20°C.

Data Link: uniprot/P00582 E. coli DNA polymerase 1

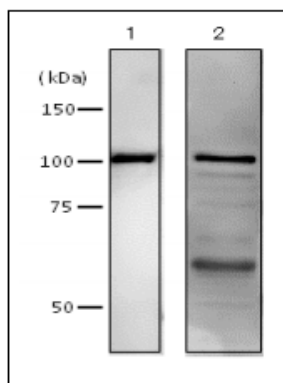


Fig.1 Western blot analysis of DNA polymerase 1 in crude extract of E. coli cells by using anti-DNA polymerase 1 antibody.

- 1: Purified E. coli DNA polymerase 1 (10 ng)
- 2: Sonic lysate supernatant of E. coli strain AB1157 cells. Primary antibody was used at 1/2,000 dilution. Predicted molecular mass of DNA polymerase 1 is 103 kDa.

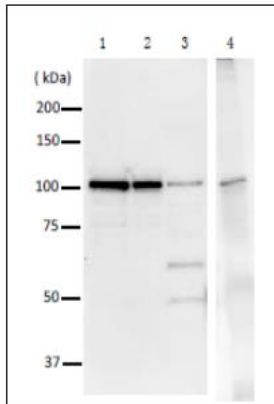


Fig.2 Immunoprecipitation of DNA polymerase 1 from crude lysate of E. coli with anti-DNA polymerase 1 antibody

1. Purified DNA polymerase 1 (20 ng), WB
2. Purified DNA polymerase 1 (10 ng), WB
3. Crude lysate of E. coli strain AB1157 (10 μ g), WB
4. The crude lysate of E.coli cells was reacted with anti-DNA polymerase 1 antibody and precipitated with protein G conjugated magnetic beads, and analyzed by WB by using anti-DNA polymerase 1 antibody. As the secondary antibody, anti-rabbit IgG antibody conjugated with HRP for IP (Abcam 131368) was used.

Key words: DNA polymerase 1, polA, A-family DNA polymerase, DNA replication, DNA repair, Proof reading, 3'-5' exonuclease activity, 5'-3' exonuclease activity