

## Anti-*E. coli* DNA polymerase 1 antibody, rabbit antiserum

61-012      100 ul

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

**Function:** *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.

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

### Applications:

1. Western blot. (1/1,000~ 1/5,000 dilution)
2. Immunoprecipitation (assay dependent)

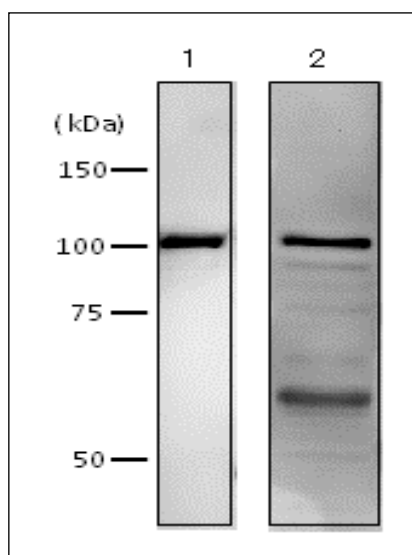
Not tested for other applications

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

**Form:** Antiserum    added with sodium azide    0.05%

**Storage:** Sent at 4C or at -20C. Spin-down and store at -20C

**Data links:** [uniprot/P00582](http://uniprot/P00582) *E. coli* DNA polymerase 1

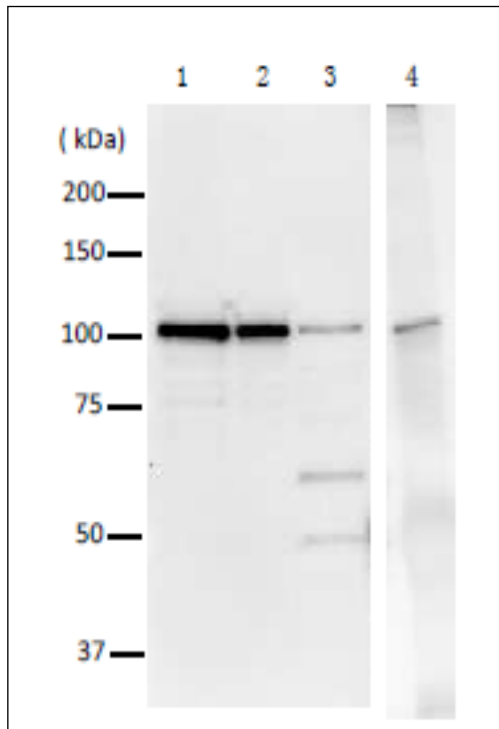


**Fig.1 Western blot analysis of DNA polymerase 1 in crude extract of *E. coli* cells by using anti-DNA polymerase 1 antibody.**

- 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  $\mu$  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.