

## **Anti-DNA polymerase $\beta$ antibody, rabbit polyclonal**

70-041 50  $\mu$ g

**Shipping and Storage:** Shipped at 4°C or -20°C and store at -20°C.

**Immunogen:** Recombinant rat DNA polymerase beta, functional

**Validated by full-size recombinant DNA polymerase  $\beta$**

**Form:** 1 mg/ml in PBS<sup>-</sup> with 50% glycerol, filter-sterilized. Azide and carrier free

**Purity:** Affinity purified with recombinant rat DNA polymerase beta.

**Reactivity:** human, rat, mouse, hamster

### **Applications**

- 1) Western blotting (1/ 2,000~ 1/3,000)
- 2) Immunoprecipitation (1/200)
- 3) Immunofluorescent staining (1/1,000)
- 4) ELISA (assay dependent)

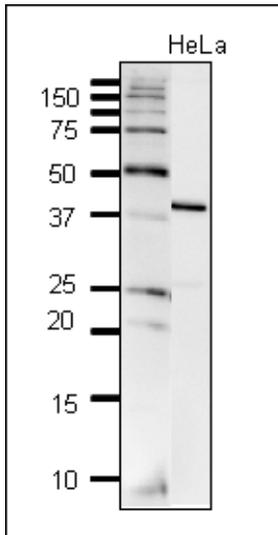
### **Background**

DNA polymerase  $\beta$  is a distributive polymerase involved in base excision repair which repairs damaged DNA by excising modified bases (oxidized, methylated, deaminated etc.). It has single-strand DNA binding and deoxyribose phosphodiesterase activities on the N-terminal side, and nucleotidyltransferase activity on the C-terminal side. The enzyme is constitutively expressed in growing cells but the level of expression is further increased by treatment with alkylating reagents such as MNNG and MMS.

### **Data Link**

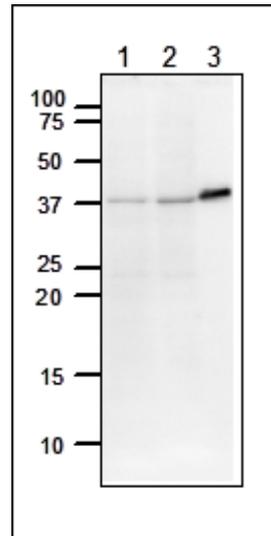
UniProtKB/Swiss-Prot [P06766](#) (DPOLB\_RAT), [P06746](#) (DPOLB\_HUMAN), [Q8K409](#) (DPOLB\_MOUSE)

**References:** This antibody has not yet been referenced in publication.



**Fig.1** Detection of DNA polymerase beta in crude extract of HeLa cells by western blotting.

The antibody was used at 1/2,000 dilution. 10 ug of the cell extract was used.



**Fig.2** Detection of DNA polymerase beta by western blotting.

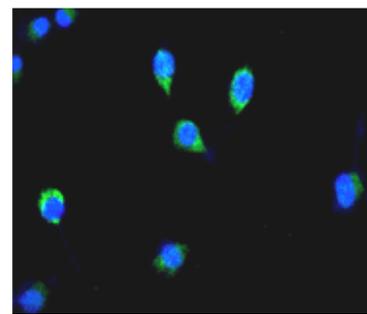
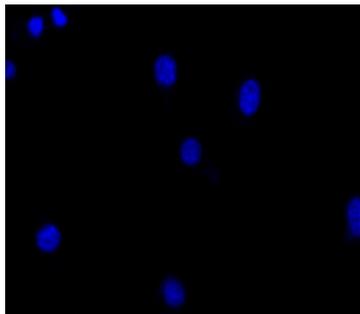
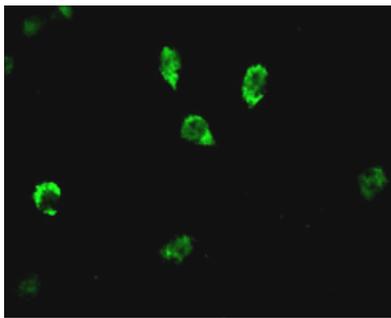
1. NIH 3T3 cells (20 ug)
2. CHO cells (20 ug)
3. Full size recombinant DNA polymerase beta (5.2 ng)

The antibody was used at 1/2,000 dilution

Anti-DNA polymerase beta antibody

DAPI

Merge



**Fig.3** Immunofluorescence staining of DNA polymerase beta in NIH 3T3 cells with the antibody.

The cells were fixed with 4% PFA and permeabilized with 0.25% Triton X-100. The anti-DNA polymerase beta antibody was used at 1/1,000 dilution. Nuclear DNA was stained with DAPI and the merged image was shown on the right.

Related product: [#10-101](#) DNA polymerase  $\beta$  (rat), recombinant enzyme with high activity