

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

Cat.#70-041, Size:50 ug

### 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.

### Specifications:

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

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

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

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

**Storage:** Shipped at 4°C and stored at -20°C

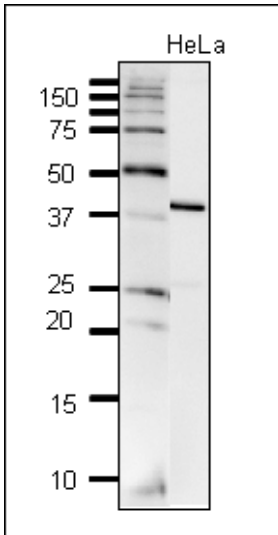
Continuation of 70-041 antiserum, this product was affinity-purified with immunogen.

### Applications

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

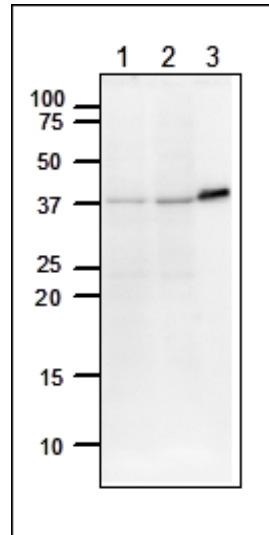
**Data Link** UniProtKB/Swiss-Prot [P06766](#) (DPOLB\_RAT), [P06746](#) (DPOLB\_HUMAN)

**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.**

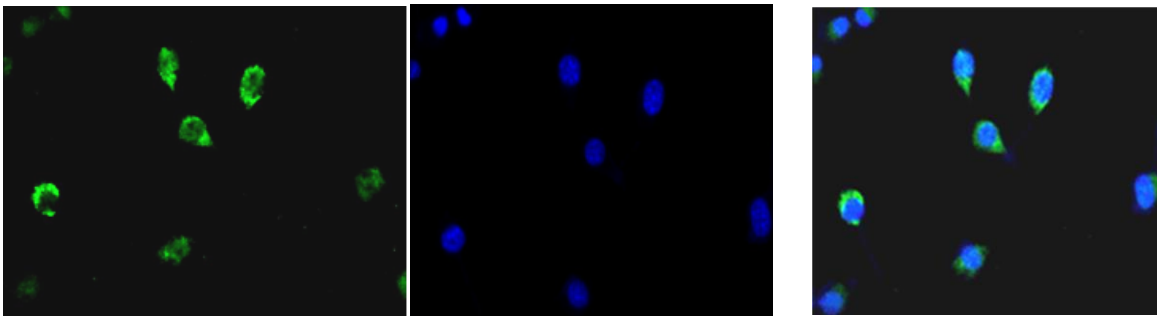
1. NIH 3TS cells (20 ug)
2. CHO cells (20 ug)
3. Full size recombinant DNA polymerase beta (5.2 ng)

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.