



# DNA pol β Polyclonal Antibody

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| <b>Catalog No</b>         | BYab-18088                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| <b>Isotype</b>            | IgG                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| <b>Reactivity</b>         | Human;Mouse;Rat                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| <b>Applications</b>       | WB;IHC;IF;ELISA                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| <b>Gene Name</b>          | POLB                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| <b>Protein Name</b>       | DNA polymerase beta                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| <b>Immunogen</b>          | The antiserum was produced against synthesized peptide derived from human DNA Polymerase beta. AA range:286-335                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| <b>Specificity</b>        | DNA pol β Polyclonal Antibody detects endogenous levels of DNA pol β protein.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| <b>Formulation</b>        | Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| <b>Source</b>             | Polyclonal, Rabbit,IgG                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| <b>Purification</b>       | The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| <b>Dilution</b>           | WB: 1/500 - 1/2000. IHC: 1/100 - 1/300. ELISA: 1/10000.. IF 1:50-200                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| <b>Concentration</b>      | 1 mg/ml                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| <b>Purity</b>             | ≥90%                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| <b>Storage Stability</b>  | -20°C/1 year                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| <b>Synonyms</b>           | POLB; DNA polymerase beta                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| <b>Observed Band</b>      | 38kD                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| <b>Cell Pathway</b>       | Nucleus. Cytoplasm. Cytoplasmic in normal conditions. Translocates to the nucleus following DNA damage.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| <b>Tissue Specificity</b> | Skin,Testis,                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| <b>Function</b>           | catalytic activity:Deoxynucleoside triphosphate + DNA(n) = diphosphate + DNA(n+1).,cofactor:Binds 2 magnesium ions per subunit.,domain:Residues 239-252 form a flexible loop which appears to affect the polymerase fidelity.,function:Repair polymerase. Conducts "gap-filling" DNA synthesis in a stepwise distributive fashion rather than in a processive fashion as for other DNA polymerases. Has a 5'-deoxyribose-5-phosphate lyase (dRP lyase) activity.,PTM:Methylation by PRMT6 stimulates the polymerase activity by enhancing DNA binding and processivity.,similarity:Belongs to the DNA polymerase type-X family.,subunit:Monomer., |

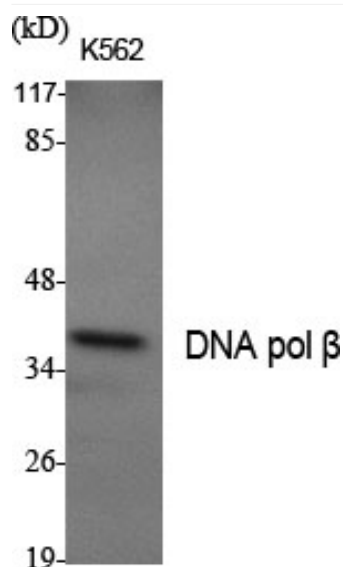
**Nanjing BYabscience technology Co.,Ltd**



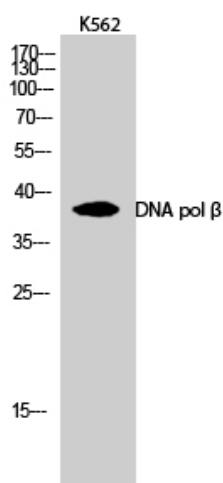
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|---------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Background                | The protein encoded by this gene is a DNA polymerase involved in base excision and repair, also called gap-filling DNA synthesis. The encoded protein, acting as a monomer, is normally found in the cytoplasm, but it translocates to the nucleus upon DNA damage. Several transcript variants of this gene exist, but the full-length nature of only one has been described to date. [provided by RefSeq, Sep 2011], |
| matters needing attention | Avoid repeated freezing and thawing!                                                                                                                                                                                                                                                                                                                                                                                   |
| Usage suggestions         | This product can be used in immunological reaction related experiments. For more information, please consult technical personnel.                                                                                                                                                                                                                                                                                      |



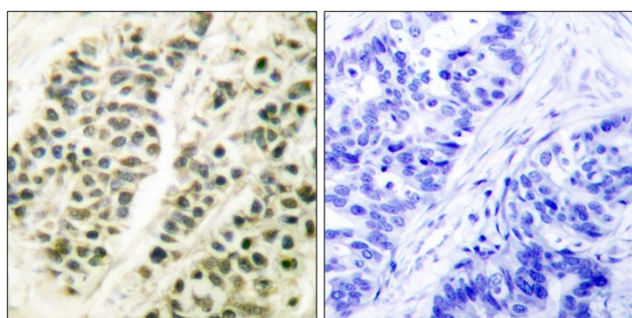
## Products Images



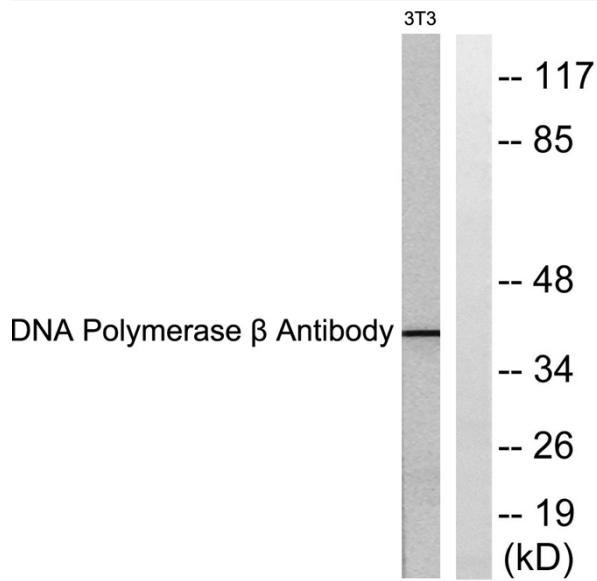
Western Blot analysis of various cells using DNA pol  $\beta$  Polyclonal Antibody



Western Blot analysis of K562 cells using DNA pol  $\beta$  Polyclonal Antibody



Immunohistochemistry analysis of paraffin-embedded human breast carcinoma tissue, using DNA Polymerase beta Antibody. The picture on the right is blocked with the synthesized peptide.



Western blot analysis of lysates from NIH/3T3 cells, using DNA Polymerase beta Antibody. The lane on the right is blocked with the synthesized peptide.