

## DNA pol $\beta$ Polyclonal Antibody

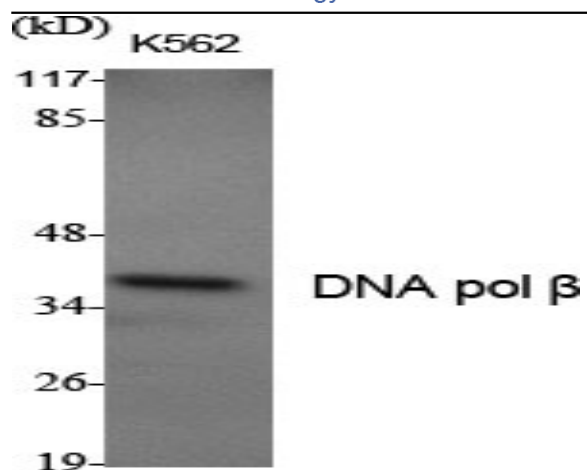
<b>Catalog No :</b>	YT1369
<b>Reactivity :</b>	Human;Mouse;Rat
<b>Applications :</b>	WB;IHC;IF;ELISA
<b>Target :</b>	DNA pol $\beta$
<b>Fields :</b>	>>Base excision repair;>>Human T-cell leukemia virus 1 infection;>>Viral carcinogenesis
<b>Gene Name :</b>	POLB
<b>Protein Name :</b>	DNA polymerase beta
<b>Human Gene Id :</b>	5423
<b>Human Swiss Prot No :</b>	P06746
<b>Mouse Gene Id :</b>	18970
<b>Mouse Swiss Prot No :</b>	Q8K409
<b>Rat Gene Id :</b>	29240
<b>Rat Swiss Prot No :</b>	P06766
<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 $\beta$ Polyclonal Antibody detects endogenous levels of DNA pol $\beta$ 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>Dilution :</b>	WB 1:500 - 1:2000. IHC 1:100 - 1:300. ELISA: 1:10000.. IF 1:50-200

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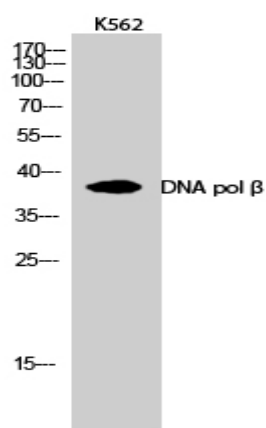
<b>Purification :</b>	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.
<b>Concentration :</b>	1 mg/ml
<b>Storage Stability :</b>	-15°C to -25°C/1 year(Do not lower than -25°C)
<b>Observed Band :</b>	38kD
<b>Cell Pathway :</b>	Base excision repair;
<b>Background :</b>	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],
<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.,
<b>Subcellular Location :</b>	Nucleus. Cytoplasm. Cytoplasmic in normal conditions. Translocates to the nucleus following DNA damage.
<b>Expression :</b>	Skin,Testis,
<b>Sort :</b>	5175
<b>No4 :</b>	1
<b>Host :</b>	Rabbit
<b>Modifications :</b>	Unmodified

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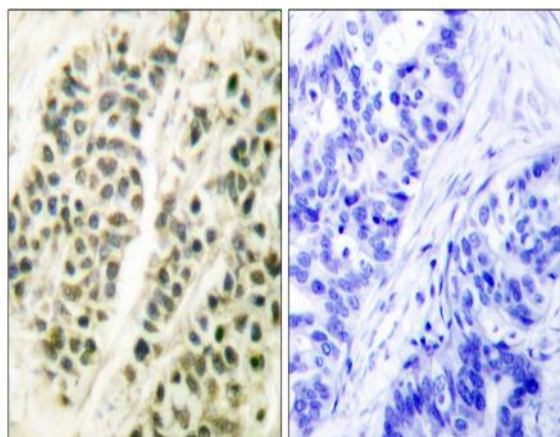
## Products Images



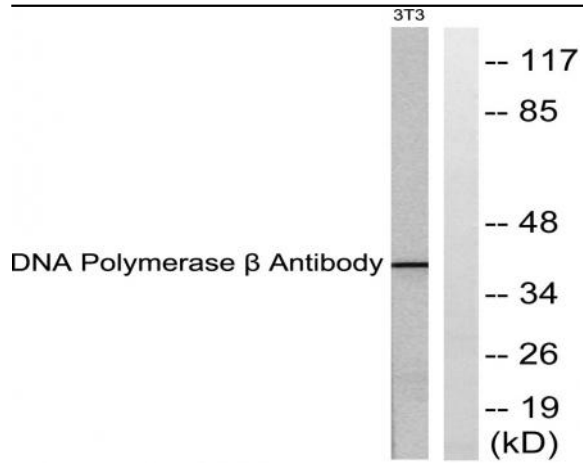
Western Blot analysis of various cells using DNA pol  $\beta$  Polyclonal Antibody



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.