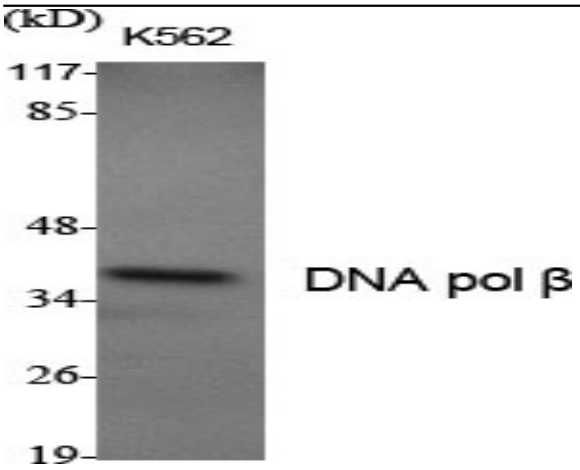
Best Tools for immunology Research

DNA pol β Polyclonal Antibody

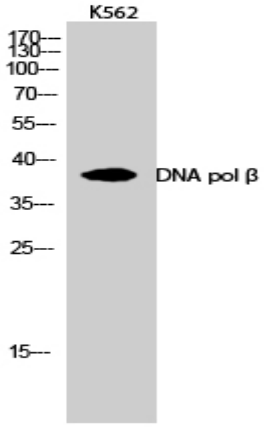
Catalog No :	YT1369
Reactivity :	Human;Mouse;Rat
Applications :	WB;IHC;IF;ELISA
Target :	DNA pol β
Fields :	>>Base excision repair;>>Human T-cell leukemia virus 1 infection;>>Viral carcinogenesis
Gene Name :	POLB
Protein Name :	DNA polymerase beta
Human Gene Id :	5423
Human Swiss Prot No :	P06746
Mouse Gene Id :	18970
Mouse Swiss Prot No :	Q8K409
Rat Gene Id :	29240
Rat Swiss Prot No :	P06766
Immunogen :	The antiserum was produced against synthesized peptide derived from human DNA Polymerase beta. AA range:286-335
Specificity :	DNA pol β Polyclonal Antibody detects endogenous levels of DNA pol β protein.
Formulation :	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Source :	Polyclonal, Rabbit,IgG
Dilution :	WB 1:500 - 1:2000. IHC 1:100 - 1:300. ELISA: 1:10000.. IF 1:50-200

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

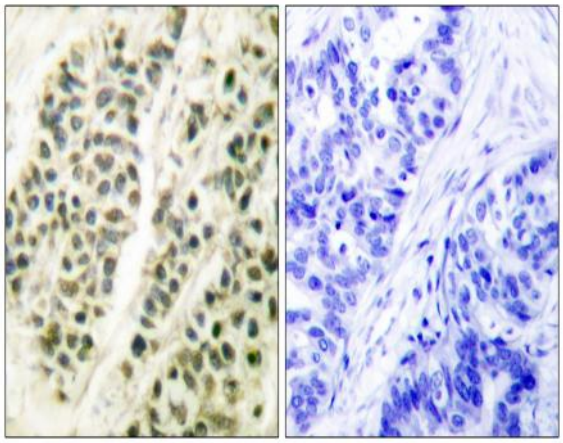
Products Images



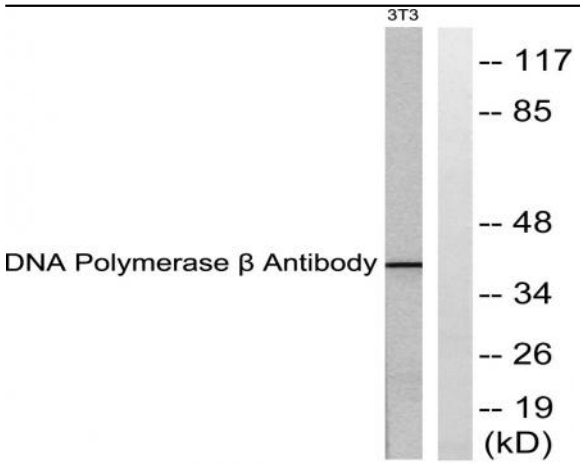
Western Blot analysis of various cells using DNA pol β Polyclonal Antibody



Western Blot analysis of K562 cells using DNA pol β 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.