



DNA pol β Polyclonal Antibody

Catalog No	YP-Ab-01655
Isotype	IgG
Reactivity	Human;Mouse;Rat
Applications	WB;IHC;IF;ELISA
Gene Name	POLB
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
Purification	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.
Dilution	WB: 1/500 - 1/2000. IHC: 1/100 - 1/300. ELISA: 1/10000.. IF 1:50-200
Concentration	1 mg/ml
Purity	$\geq 90\%$
Storage Stability	-20°C/1 year
Synonyms	DNA pol β ;POLB;DNA polymerase beta
Observed Band	38kD
Calculated Molecular Weight	38kD
Cell Pathway	Nucleus. Cytoplasm. Cytoplasmic in normal conditions. Translocates to the nucleus following DNA damage.
Tissue Specificity	Skin,Testis,
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.,

**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

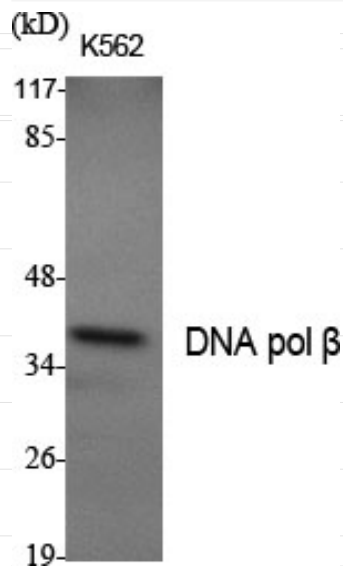
Avoid repeated freezing and thawing!

Usage suggestions

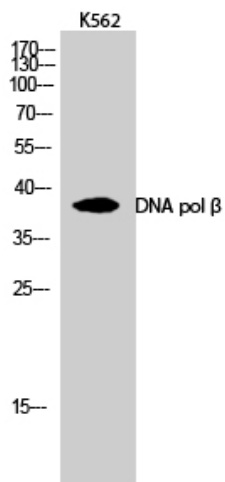
This product can be used in immunological reaction related experiments. For more information, please consult technical personnel.



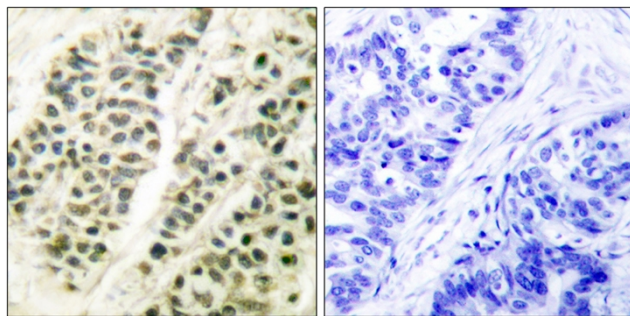
Products Images



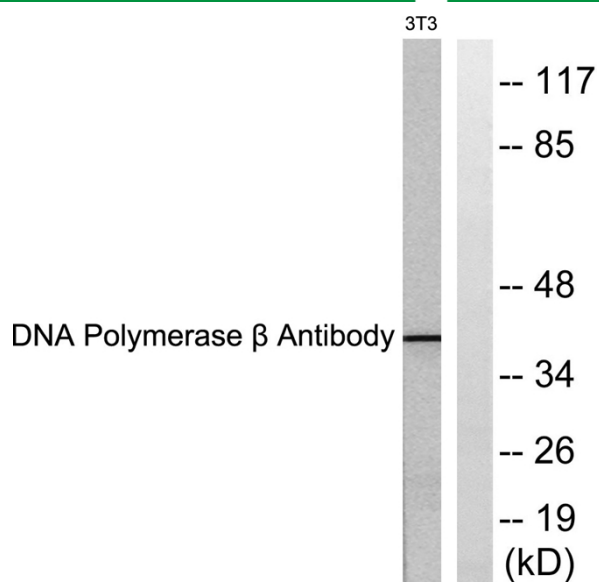
Western Blot analysis of various cells using DNA pol β Polyclonal Antibody



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.