

# DNA pol $\beta$ Polyclonal Antibody

Catalog # AP69552

## Product Information

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<b>Application</b>	WB, IHC-P, IF, ICC, E
<b>Primary Accession</b>	<a href="#">P06746</a>
<b>Reactivity</b>	Human, Mouse, Rat
<b>Host</b>	Rabbit
<b>Clonality</b>	Polyclonal
<b>Calculated MW</b>	38178

## Additional Information

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<b>Gene ID</b>	5423
<b>Other Names</b>	POLB; DNA polymerase beta
<b>Dilution</b>	WB~~Western Blot: 1/500 - 1/2000. Immunohistochemistry: 1/100 - 1/300. ELISA: 1/10000. Not yet tested in other applications. IHC-P~~N/A IF~~1:50~200 ICC~~N/A E~~N/A
<b>Format</b>	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.09% (W/V) sodium azide.
<b>Storage Conditions</b>	-20°C

## Protein Information

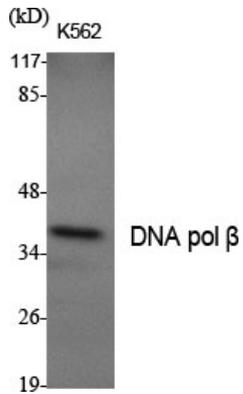
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<b>Name</b>	POLB
<b>Function</b>	Repair polymerase that plays a key role in base-excision repair (PubMed: <a href="#">10556592</a> , PubMed: <a href="#">9207062</a> , PubMed: <a href="#">9572863</a> ). During this process, the damaged base is excised by specific DNA glycosylases, the DNA backbone is nicked at the abasic site by an apurinic/aprimidic (AP) endonuclease, and POLB removes 5'-deoxyribose-phosphate from the preincised AP site acting as a 5'-deoxyribose-phosphate lyase (5'-dRP lyase); through its DNA polymerase activity, it adds one nucleotide to the 3' end of the arising single-nucleotide gap (PubMed: <a href="#">10556592</a> , PubMed: <a href="#">17526740</a> , PubMed: <a href="#">9556598</a> , PubMed: <a href="#">9572863</a> , PubMed: <a href="#">9614142</a> ). Conducts 'gap-filling' DNA synthesis in a stepwise distributive fashion rather than in a processive fashion as for other DNA polymerases. It is also able to cleave sugar-phosphate bonds 3' to an intact AP site, acting as an AP lyase (PubMed: <a href="#">9614142</a> ).
<b>Cellular Location</b>	Nucleus. Cytoplasm. Note=Cytoplasmic in normal conditions. Translocates to the nucleus following DNA damage

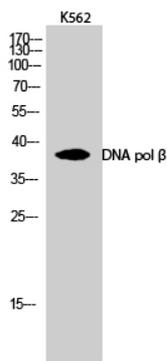
## Background

Repair polymerase that plays a key role in base-excision repair. Has 5'-deoxyribose-5-phosphate lyase (dRP lyase) activity that removes the 5' sugar phosphate and also acts as a DNA polymerase that adds one nucleotide to the 3' end of the arising single-nucleotide gap. Conducts 'gap-filling' DNA synthesis in a stepwise distributive fashion rather than in a processive fashion as for other DNA polymerases.

## 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

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.