

**DNA Polymerase beta Antibody**  
Rabbit mAb  
Catalog # AP91475**Specification****DNA Polymerase beta Antibody - Product Information**

Application	WB, IHC, ICC, IP
Primary Accession	<a href="#">P06746</a>
Reactivity	Rat
Clonality	Monoclonal

**Other Names**

DNA directed DNA polymerase beta; DNA pol beta; DNA polymerase beta; Pol B; Pol beta; POLB; Polymerase (DNA directed) beta;

Isotype	Rabbit IgG
Host	Rabbit
Calculated MW	38178 Da

**DNA Polymerase beta Antibody - Additional Information**

Purification	Affinity-chromatography
Immunogen	A synthesized peptide derived from human DNA Polymerase beta
Description	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.
Storage Condition and Buffer	Rabbit IgG in phosphate buffered saline , pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol. Store at +4°C short term. Store at -20°C long term. Avoid freeze / thaw cycle.

**DNA Polymerase beta Antibody - Protein Information****Name** POLB**Function**

Repair polymerase that plays a key role in base-excision repair (PubMed:<a href="http://www.uniprot.org/citations/10556592" target="\_blank">10556592</a>, PubMed:<a href="http://www.uniprot.org/citations/9207062" target="\_blank">9207062</a>, PubMed:<a href="http://www.uniprot.org/citations/9572863" target="\_blank">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/apyrimidic (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="http://www.uniprot.org/citations/10556592"

target="\_blank">10556592</a>, PubMed:<a href="http://www.uniprot.org/citations/17526740" target="\_blank">17526740</a>, PubMed:<a href="http://www.uniprot.org/citations/9556598" target="\_blank">9556598</a>, PubMed:<a href="http://www.uniprot.org/citations/9572863" target="\_blank">9572863</a>, PubMed:<a href="http://www.uniprot.org/citations/9614142" target="\_blank">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="http://www.uniprot.org/citations/9614142" target="\_blank">9614142</a>).

### Cellular Location

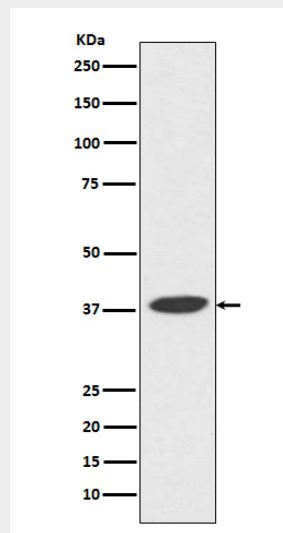
Nucleus. Cytoplasm. Note=Cytoplasmic in normal conditions. Translocates to the nucleus following DNA damage

### DNA Polymerase beta Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

### DNA Polymerase beta Antibody - Images



Western blot analysis of DNA Polymerase beta expression in A431 cell lysate.