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DNA Polymerase beta Antibody
Rabbit mAb
Catalog # AP91475

Specification

DNA Polymerase beta Antibody - Product Information

Application	**WB, IHC, ICC, IP**
Primary Accession	P06746
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

Dilution	**WB~~1:1000** **IHC~~1:100~500** **ICC~~N/A** **IP~~N/A**
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:10556592, PubMed:9207062, PubMed:9572863). 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:10556592, PubMed:17526740, PubMed:9556598, PubMed:9572863, PubMed:9614142). 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:9614142).

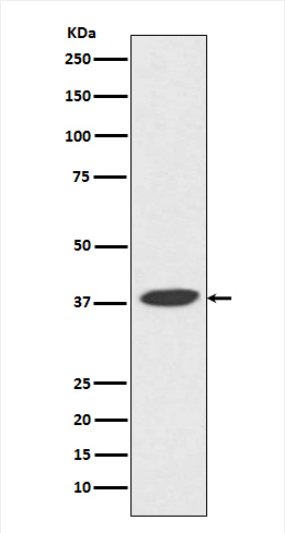
Cellular Location
Nucleus. Cytoplasm. Note=Cytoplasmic in normal conditions. Translocates to the nucleus following DNA damage

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 Cytomety
- Cell Culture

DNA Polymerase beta Antibody - Images



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