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DNA Polymerase beta Rabbit mAb

Catalog # AP77758

Product Information

Application	WB, IHC-P, IF, ICC, IP
Primary Accession	P06746
Reactivity	Rat, Human, Mouse
Host	Rabbit
Clonality	Monoclonal Antibody
Isotype	IgG
Conjugate	Unconjugated
Immunogen	A synthesized peptide derived from human DNA Polymerase beta
Purification	Affinity Chromatography
Calculated MW	38178

Additional Information

Gene ID	5423
Other Names	POLB
Dilution	WB~~1/500-1/1000 IHC-P~~N/A IF~~1:50~200 ICC~~N/A IP~~N/A
Format	Liquid in 10mM PBS, pH 7.4, 150mM sodium chloride, 0.05% BSA, 0.02% sodium azide and 50% glycerol.
Storage	Store at 4°C short term. Aliquot and store at -20°C long term. Avoid freeze/thaw cycles.

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:8841119, 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

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