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# PNK / PNKP Antibody

Rabbit mAb
Catalog # AP93004

## Product Information

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|---|---|
| **Application** | WB, IHC, IP |
| **Primary Accession** | Q96T60 |
| **Reactivity** | Human |
| **Clonality** | Monoclonal |
| **Other Names** | DEM1; EIEE10; MCSZ; PNK1; Pnkp; PNKP DNA kinase; |
| **Isotype** | Rabbit IgG |
| **Host** | Rabbit |
| **Calculated MW** | 57076 |

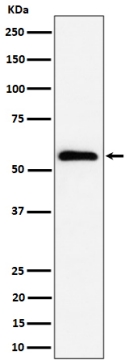
## Additional Information

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|---|---|
| **Dilution** | WB 1:500~1:2000 IHC 1:50~1:200 IP 1:50 |
| **Purification** | Affinity-chromatography |
| **Immunogen** | A synthesized peptide derived from human PNK / PNKP |
| **Description** | Catalyzes the phosphorylation of DNA at 5'-hydroxyl termini and can dephosphorylate its 3'-phosphate termini. Plays an important function in DNA repair following ionizing radiation or oxidative damage. |
| **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. |

## Protein Information

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|---|---|
| **Name** | PNKP {ECO:0000303\|PubMed:10446192, ECO:0000312\|HGNC:HGNC:9154} |
| **Function** | Plays a key role in the repair of DNA damage, functioning as part of both the non-homologous end-joining (NHEJ) and base excision repair (BER) pathways (PubMed:10446192, PubMed:10446193, PubMed:15385968, PubMed:20852255, PubMed:28453785). Through its two catalytic activities, PNK ensures that DNA termini are compatible with extension and ligation by either removing 3'-phosphates from, or by phosphorylating 5'-hydroxyl groups on, the ribose sugar of the DNA backbone (PubMed:10446192, PubMed:10446193). |
| **Cellular Location** | Nucleus. Chromosome. Note=Localizes to site of double-strand breaks. |
| **Tissue Location** | Expressed in many tissues with highest expression in spleen and testis, and lowest expression in small intestine (PubMed:10446192). Expressed in higher amount in pancreas, heart and kidney and at lower levels in brain, lung and liver (PubMed:10446193) |

## Images




Western blot analysis of PNK / PNKP expression in HeLa cell lysate.

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