PNK / PNKP Antibody

Rabbit mAb
Catalog # AP93004

Product Information

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

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

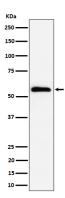|	
Name	PNKP {ECO:0000303|PubMed:10446192, ECO:0000312|HGNC:HGNC:9154}
Function	Plays a key role in the repair of DNA damage, functioning as part of both the non-homologous end-joining (NHEJ) and base excision repair (BER) pathways (PubMed:10446192, PubMed:10446193, PubMed:15385968, PubMed:20852255, 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'.