



PNKP Polyclonal Antibody

Catalog No	YP-Ab-04940
Isotype	IgG
Reactivity	Human;Rat;Mouse;
Applications	WB;ELISA
Gene Name	PNKP
Immunogen	Synthesized peptide derived from human protein . at AA range: 50-130
Specificity	PNKP Polyclonal Antibody detects endogenous levels of protein.
Formulation	Liquid in PBS containing 50% glycerol, and 0.02% sodium azide.
Source	Polyclonal, Rabbit,IgG
Purification	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.
Dilution	WB 1:500-2000 ELISA 1:5000-20000
Concentration	1 mg/ml
Purity	≥90%
Storage Stability	-20°C/1 year
Synonyms	DNA 5 kinase/3 phosphatase;PNK;PNKP;Bifunctional polynucleotide phosphatase/kinase (DNA 5'-kinase/3'-phosphatase) (Polynucleotide kinase-3'-phosphatase) [Includes: Polynucleotide 3'-phosphatase (EC 3.1.3.32) (2'(3')-polynucleotidase);P
Observed Band	57 kDa
Calculated Molecular Weight	521 aa, 57 kDa
Cell Pathway	Nucleus . Chromosome . Localizes to site of double-strand breaks. .
Tissue Specificity	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).
Function	catalytic activity:A 3'-phosphopolynucleotide + H(2)O = a polynucleotide + phosphate.,catalytic activity:ATP + 5'-dephospho-DNA = ADP + 5'-phospho-DNA.,function: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., PTM:Phosphorylated upon DNA damage, probably by ATM or ATR.,similarity:In the N-terminal section; belongs to the DNA 3' phosphatase family.,tissue



specificity: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).,

Background

This locus represents a gene involved in DNA repair. In response to ionizing radiation or oxidative damage, the protein encoded by this locus catalyzes 5' phosphorylation and 3' dephosphorylation of nucleic acids. Mutations at this locus have been associated with microcephaly, seizures, and developmental delay.[provided by RefSeq, Sep 2010],

matters needing attention

Avoid repeated freezing and thawing!

Usage suggestions

This product can be used in immunological reaction related experiments. For more information, please consult technical personnel.

Products Images