

Product datasheet for **RC207551**

PNK (PNKP) (NM_007254) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	PNK (PNKP) (NM_007254) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	PNK
Synonyms:	AOA4; CMT2B2; EIEE10; MCSZ; PNK
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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ORF Nucleotide Sequence:

>RC207551 ORF sequence
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**GCGATCGCC**

ATGGGCGAGGTGGAGGCCCGGGCCGCTTGTGGCTCGAGAGCCCCCTGGGGAGCGCCCCCATCTTCC
 TGCCCTCGGACGGGCAAGCCCTGGTCTGGGCAGGGGACCCTGACCCAGGTTACGGACCGGAAGTGCTC
 CAGAACTCAAGTGGAGCTGGTCGAGATCCTGAGACCCGGACAGTGGCAGTGAACAGCTGGGAGTTAAC
 CCCTCAACTACCGGGACCCAGGAGTTGAAGCCGGGTTGGAGGGCTCTCTGGGGTGGGGACACACTGT
 ATTTGGTCAATGGCCTCCACCCACTGACCTGCGCTGGGAAGAGACCCGCACACCAGAATCCAGCCAGA
 TACTCCGCTGGCACCCCTCTGGTGTCCCAAGATGAGAAGAGAGATGCTGAGCTGCCGAAGAAGCGTATG
 CGGAAGTCAAACCCGGCTGGGAGAACTGGAGAAGTTGCTAGTGTTCACCGCAGCTGGGGTGAACCCC
 AGGGCAAGGTGGCTGGCTTTGATCTGGACGGGACGCTCATCACCACACGCTCTGGGAAGGCTTTCCAC
 TGCCCCAGTGACTGGAGGATCTTGTACCCAGAGATCCCGTAAAGCTCCGAGAGCTGGAAGCCGAGGGC
 TACAAGCTGGTGTCTTACCAACCAGATGAGCATCGGGCGCGGAAGCTGCCAGCCGAGGATTAAGG
 CCAAGGTGGAGGCTGTGGTGGAGAAGCTGGGGTCCCCTTCCAGGTGCTGGTGGCCACGCACGCAGGCTT
 GTACCGGAAGCCGGTGACGGGCATGTGGGACCATCTGCAGGAGCAGGCCAACGACGGCACGCCCATATCC
 ATCGGGGACAGCATCTTTGTGGGAGACGCGCCGACGCCCGGCAACTGGGCCCGGGCGGAAGAAGA
 AAGACTTCTCCTGCGCCGATCGCTGTTGCCCTCAACCTTGGCTGCCCTTCGCCACGCCTGAGGAGTT
 CTTTCTCAAGTGGCCAGCAGCCGGCTTCGAGCTCCAGCCTTTGATCCGAGGACTGTCTCCCGCTCAGGG
 CCTCTCTGCCTCCCCGAGTCCAGGGCCCTCTGAGCGCCAGCCCGAGGTTGGTGTGCGAGTGGGATTCC
 CTGGGGCCGGGAAGTCCACCTTTCTCAAGAAGCACCTCGTGTGCGCCGGATATGTCCACGTGAACAGGGA
 CACGCTAGGCTCCTGGCAGCGCTGTGTACCACGTGTGAGACAGCCCTGAAGCAAGGGAACCGGGTCGCC
 ATCGACAACAAACCCAGACGCGCGAGCCGCGCCAGGTACGTCCAGTGTGCCGAGCCGCGGGCGTCC
 CCTGCCGTGTTCTCTTACCAGCCACTCTGGAGCAGCGCGCCACAACAACCGTTTCGAGAGATGAC
 GGACTCTCTCATATCCCGTGTGAGACATGGTATGTATGGCTACAGGAAGCAGTTCGAGGCCCAACG
 CTGGCTGAAGGCTTCTCTGCCATCTGGAGATCCCGTCCGGCTATGGGTGGAGCCGAGGCTGGGGCGGC
 TGTACTGCCAGTCTCCGAGGGC

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>RC207551 protein sequence
 Red=Cloning site Green=Tags(s)

MGEVEAPGRLWLESPPGGAPPIFLPSDQALVLGRGPLTQVTRKCSRTQVELVADPETRTVAVKQLGVN
 PSTTGTQELKPGLESLGVGDTLYLVNGLHPLTLRWEETRTPEQPDPPTPGTPLVSQDEKRDAELPKKRM
 RKSNPGWENLEKLLVFTAAGVKPQKQVAGFDLDTLITTRSGKVFPPTGSDWRILYPEIPRKLRELEAEG
 YKLVIFTNQMSIGRGKLPAAEFKAKVEAVVEKLGVPFQVLVATHAGLYRKPVTGMWDHLQEQAQNDGTPIS
 IGDSIFVGDAAGRPANWAPGRKKKDFSCADRLFALNLGLPFATPEEFFLKWPAAGFELPAFDPRTVSRSG
 PLCLPESRALLSASPEVVAVGFPAGKSTFLKKHLVSAGYVHVNRDTLGSWQRCVTTCTETALKQGKRVA
 IDNTNPDAASRARYVQCARAAGVPCRCFLFTATLEQARHNNRFREMTDSSHIPVSDMVMYGYRKQFEAPT
 LAEGFSAILEIPFRLWVEPRLGRLYCFSEG

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites:

Sgfl-MluI

Cloning Scheme:


ACCN: NM_007254

ORF Size: 1563 bp

OTI Disclaimer: The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially in agreement with the reference, but a complete review of all prevailing variants is recommended prior to use. [More info](#)

OTI Annotation: This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.

Components: The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).

- Reconstitution Method:**
1. Centrifuge at 5,000xg for 5min.
 2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.
 3. Close the tube and incubate for 10 minutes at room temperature.
 4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.
 5. Store the suspended plasmid at -20°C. The DNA is stable for at least one year from date of shipping when stored at -20°C.

RefSeq: [NM_007254.4](#)

RefSeq Size: 1721 bp

RefSeq ORF: 1566 bp

Locus ID: 11284

UniProt ID: [Q96T60](#)

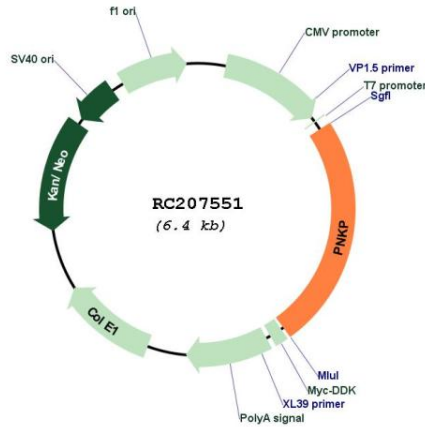
Cytogenetics: 19q13.33

Protein Families: Druggable Genome, Phosphatase

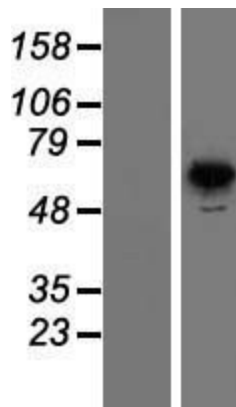
MW: 57.1 kDa

Gene Summary: 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]

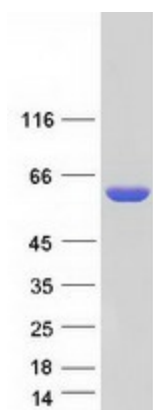
Product images:



Circular map for RC207551



Western blot validation of overexpression lysate (Cat# [LY416093]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC207551 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified PNKP protein (Cat# [TP307551]). The protein was produced from HEK293T cells transfected with PNKP cDNA clone (Cat# RC207551) using MegaTran 2.0 (Cat# [TT210002]).