

Product datasheet for **RC209379**

PCNA (NM_182649) Human Tagged ORF Clone

Product data:

Product Type: Expression Plasmids
Product Name: PCNA (NM_182649) Human Tagged ORF Clone
Tag: Myc-DDK
Symbol: PCNA
Synonyms: ATLD2
Vector: pCMV6-Entry (PS100001)
E. coli Selection: Kanamycin (25 ug/mL)
Cell Selection: Neomycin
ORF Nucleotide Sequence: >RC209379 ORF sequence
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGGATCGCC**

ATGTT**CGAGGCGCGCCTGGTCCAGGGCTCCATCCTCAAGAAGGTGTTGGAGGCACTCAAGGACCTCATCA**
ACGAGGCCTGCTGGGATATTAGCTCCAGCGGTGTAACCTGCAGAGCATGGACTCGTCCCACGTCTCTTT
GGTGCAGCTCACCTGCGGTCTGAGGGCTCGACACCTACCGCTGCGACCGAACCTGGCCATGGGCGTG
AACCTCACCAGTATGTCCAAAATACTAAAATGCGCCGGCAATGAAGATATCATTACACTAAGGGCCGAAG
ATAACGCGGATACCTTGCGCTAGTATTTGAAGCACCAAACAGGAGAAAAGTTTCAGACTATGAAATGAA
GTTGATGGATTTAGATGTTGAACAACCTTGAATTCCAGAACAGGAGTACAGCTGTGTAGTAAAGATGCCT
TCTGGTGAATTTGCACGTATATGCCGAGATCTCAGCCATATTGGAGATGCTGTTGTAATTCCTGTGCAA
AAGACGGAGTAAATTTCTGCAAGTGGAGAAGCTTGAATGGAAACATTAATTTGTCACAGACAAGTAA
TGTCGATAAAGAGGAGGAAGCTGTTACCATAGAGATGAATGAACCAGTTCACTAACTTTGCACTGAGG
TACCTGAATCTTTACAAAAGCCACTCCACTCTTTCAACGGTGACACTCAGTATGTCTGCAGATGTAC
CCCTTGTGTAGAGTATAAAATGCGGATATGGGACACTTAAAATACTACTTGGCTCCCAAGATCGAGGA
TGAAGAAGGATCT

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA



Protein Sequence: >RC209379 protein sequence
 Red=Cloning site Green=Tags(s)

MFEARLVQGSILKKVLEALKDLINACWDISSSGVNLQSMDSHVSLVQLTLRSEGFDTYRCDRNLAMGV
 NLTSMKILKCAINEDIITLRAEDNADTLALVFEAPNQEKVSDYEMKMLMDLDVEQLGIPEQEYSCVVKMP
 SGEFARICRDLSHIGDAVVISCAKDGKVFASGELGNGNIKLSQTSNVDKEEEAVTIEMNEPVQLTFALR
 YLNFFTKATPLSSTVTLSMSADVPLVVEYKIADMGHLYLAPKIEDEEGS

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

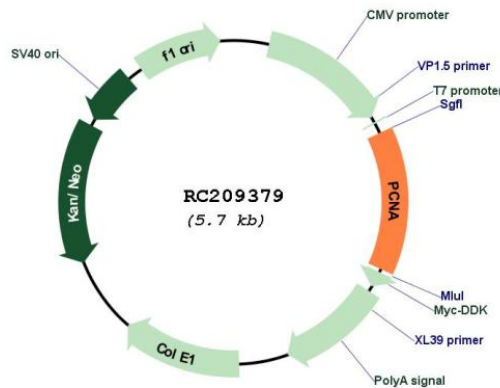
Chromatograms: https://cdn.origene.com/chromatograms/mk6142_c07.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:

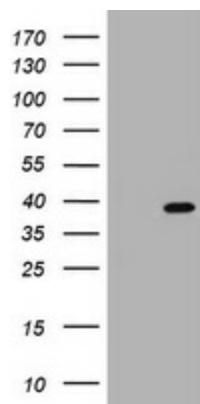


Plasmid Map:



ACCN: NM_182649

ORF Size:	783 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:	<ol style="list-style-type: none">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_182649.2
RefSeq Size:	1319 bp
RefSeq ORF:	786 bp
Locus ID:	5111
UniProt ID:	P12004
Cytogenetics:	20p12.3
Protein Families:	Druggable Genome, Stem cell - Pluripotency
Protein Pathways:	Base excision repair, Cell cycle, DNA replication, Mismatch repair, Nucleotide excision repair
MW:	28.8 kDa
Gene Summary:	The protein encoded by this gene is found in the nucleus and is a cofactor of DNA polymerase delta. The encoded protein acts as a homotrimer and helps increase the processivity of leading strand synthesis during DNA replication. In response to DNA damage, this protein is ubiquitinated and is involved in the RAD6-dependent DNA repair pathway. Two transcript variants encoding the same protein have been found for this gene. Pseudogenes of this gene have been described on chromosome 4 and on the X chromosome. [provided by RefSeq, Jul 2008]

Product images:

Western blot validation of overexpression lysate (Cat# [LY405433]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC209379 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).