

Product datasheet for **RG201741**

PCNA (NM_002592) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	PCNA (NM_002592) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	PCNA
Synonyms:	ATLD2
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>RG201741 representing NM_002592 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGTTTCGAGGCGCGCCTGGTCCAGGGCTCCATCCTCAAGAAGGTGTTGGAGGCACTCAAGGACCTCATCA
ACGAGGCCTGCTGGGATATTAGCTCCAGCGGTGTAACCTGCAGAGCATGGACTCGTCCCACGTCTCTTT
GGTGCAGCTCACCTGCGGTCTGAGGGCTTCGACACCTACCGCTGCGACCGCAACCTGGCCATGGGCGTG
AACCTCACAGTATGTCCAAAATACTAAAATGCGCCGGCAATGAAGATATCATTACACTAAGGGCCGAAG
ATAACGCGGATACCTTGGCGCTAGTATTTGAAGCACCAAACAGGAGAAAGTTTCAGACTATGAAATGAA
GTTGATGGATTTAGATGTTGAACAACCTTGAATTCAGAACAGGAGTACAGCTGTGTAGTAAAGATGCC
TCTGGTGAATTTGCACGTATATGCCGAGATCTCAGCCATATTGGAGATGCTGTTGTAATTTCTGTGCAA
AAGACGGAGTGAATTTCTGCAAGTGGAGAACCTTGGAAATGGAAACATTAATTTGTCACAGACAAGTAA
TGTCGATAAAGAGGAGGAAGCTGTTACCATAGAGATGAATGAACCACTTCACTAACTTTTGCAGTGGG
TACCTGAACTTCTTTACAAAAGCCACTCCACTCTTCAACGGTGACACTCAGTATGTCTGCAGATGTAC
CCCTTGTGTAGATATAAATTTGCGGATATGGGACACTAAAATACTACTTGGCTCCCAAGATCGAGGA
TGAAGAAGGATCT

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA



[View online »](#)

Protein Sequence: >RG201741 representing NM_002592
 Red=Cloning site Green=Tags(s)

MFEARLVQGSILKKVLEALKDLINACWDISSSGVNLQSMDSHVSLVQLTLRSEGFDTYRCDRNLAMGV
 NLTSMKILKCAINEDIITLRAEDNADTLALVFEAPNQEKVSDYEMKMLMDLDVEQLGIPEQEYSCVVKMP
 SGEFARICRDLSHIGDAVVISCAKDGVKFSASGELGNGNIKLSQTSNVDKEEEAVTIEMNEPVQLTFALR
 YLNFFTKATPLSSTVTLSMSADVPLVVEYKIADMGHKLYYLAPKIEDEEGS

TRTRPLE - GFP Tag - V

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_002592

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:

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_002592.2](#), [NP_002583.1](#)

RefSeq Size: 1355 bp

RefSeq ORF: 786 bp

Locus ID: 5111

UniProt ID: [P12004](#)

Cytogenetics: 20p12.3

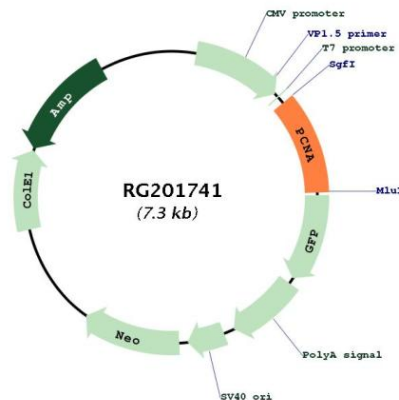
Domains: PCNA

Protein Families: Druggable Genome, Stem cell - Pluripotency

Protein Pathways: Base excision repair, Cell cycle, DNA replication, Mismatch repair, Nucleotide excision repair

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:



Circular map for RG201741