

Product datasheet for **RC201001**

Plakophilin 3 (PKP3) (NM_007183) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Plakophilin 3 (PKP3) (NM_007183) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Plakophilin 3
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



[View online »](#)

**ORF Nucleotide
Sequence:**

>RC201001 representing NM_007183
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGCATCGC**

ATGCAGGACGGTAACCTCCTGCTGTCGGCCCTGCAGCCTGAGGCCGGCGTGTGCTCCCTGGCGCTGCCCT
 CTGACCTGCAGCTGGACCGCCGGGGCGCCGAGGGGCCGAGGCCGAGCGCTGCGGGCAGCCCGCTCCA
 GGAGCAGGTCCGCGCCCGCTCTTGACGTGGGACAGCAGCCGCGGCACAACGGGGCCGCTGAGCCCGAG
 CCTGAGGCCGAGACTGCCAGAGGCACATCCAGGGGCGAGTACCACACCCTGCAGGCTGGCTTCAGCTCTC
 GCTCTCAGGGCTGAGTGGGGACAAGACCTCGGGCTTCCGGCCCATCGCCAAGCCGGCTACAGCCAGC
 CTCCTGGTCTCCCGCTCCGCCGTGGATCTGAGCTGCAGTCGGAGGCTGAGTTCAGCCACAACGGGGG
 AGCGCTTTGGGGCCGCTGGGTACGGGGTGCCAGCCACCCCTCCCATGCCACCAGGCGCTGTCTCT
 TCCATGAGCGCGTGGGGTTGGGAGCCGGGCGACTATGACAACTCTCCCTGCGCTCGTGGCGCTGGG
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 AGGGCTTTGCGTACGAGCGCCAGGCCAGCTCCAGCTCCAGCCGGGAGGGGGCTGGACTGGCCCGAGG
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 CCACCGGAGCCGCGGGGTAGGCGGGGCGAGTCCGGGGGCGCTCCTGGAGCCAGTGCTCGAGCGCATCT
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 GGCCCTGGTGGAGGAGAACGGGATCTTCGAGCTGCTGCGGACACTGCGGGAGCAGGATGATGAGCTTCGC
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 CGCTGGAGCAGCTCACAGACCTGGTGTGAGCCCCCTGTCGGGGGCTGGGGTCCCCCTCATCCAGCA
 GAACGCTCGGAGGCGGAGATCTTCTAACGCCACCGGCTTCTCAGGAACCTCAGCTCAGCCTCTCAG
 GCCACTCGCCAGAAGATGCGGGAGTGCCACGGGCTGGTGGACGCCCTGGTCACTCTATCAACACGCCC
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 CGTGGGGCTGTACAACCGGCTGTGTCAGCGCTGCGAGCTCAACCGGCACACGACGAGGCGCGCGGG
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 TCCTGGGCCA

ACGCGTACGCGGCGGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >RC201001 representing NM_007183
 Red=Cloning site Green=Tags(s)

MQDGNFLLSALQPEAGVCSLALPSDLQLDRRGAEQPEAERLRAARVQEQVRARLLQLGQQPRHNGAAEPE
 PEAETARGTSRGQYHTLQAGFSSRSQGLSGDKTSGFRPIAKPAYSPASWSSRSAYDLSCSRRLSSAHNGG
 SAFGAAGYGGAQPTPPMPTRPVSFHERGGVGSRADYDTLSLRSLRLGPGGLDDRYSLVSEQLEPAATSTY
 RAFAYERQASSSSSRAGGLDWPEATEVSPSRTIRAPAVRTLQRFQSSHRSRGVGGAVPGAVLEPVARAPS
 VRSLSLSLADSGHLPDVHGFNSYGSRTLRQLSSGFDDIDLPSAVKYLMA SDPNLQVLGAAYIQHKCYSD
 AAARKQARSLQAVPRLVKLFNHNQEVQRHATGAMRNL IYDNADNKLALVEENGIFELLRTLREQDDELRL
 KNVTGILWNLSSSDHLKDRLARDTLEQLTDLVLSPLSGAGGPPLIQQNASEAEIFYNATGFLRNLSSASQ
 ATRQKMRECHGLVDALVTSINHALDAGKCEDKSVENAVCVLRNLSYRLYDEMPPSALQRLEGRGRDLAG
 APPGEVVGCFTPQSRRLRELPLAADALTFAEVSKDPKGLEWLWSPQIVGLYNRLLRCELNRHTTEAAAG
 ALQNITAGDRRWAGVLSRLALEQERILNPLLDVRTADHHQLRSLTGLIRNLSRNARNKDEMSTKVVSHL
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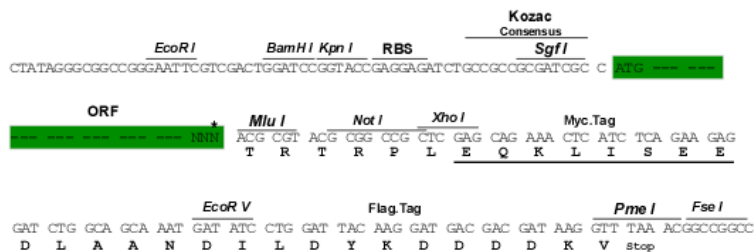
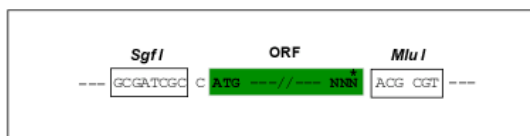
TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk8112_b06.zip

Restriction Sites: Sgfi-MluI

Cloning Scheme:

Cloning sites used for ORF Shuttling:



* The last codon before the Stop codon of the ORF

ACCN: NM_007183

ORF Size: 2391 bp

OTI Disclaimer: Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at custsupport@origene.com or by calling 301.340.3188 option 3 for pricing and delivery.

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.

Note: Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.

RefSeq: [NM_007183.2](#), [NP_009114.1](#)

RefSeq Size: 2845 bp

RefSeq ORF: 2394 bp

Locus ID: 11187

UniProt ID: [Q9Y446](#)

Cytogenetics: 11p15.5

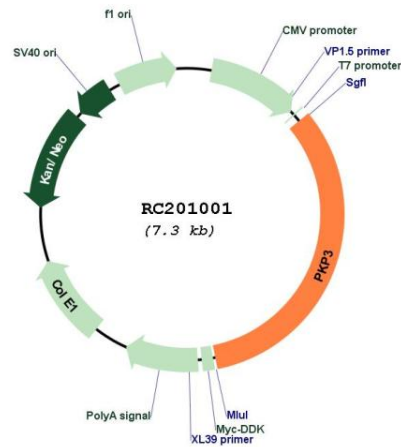
Domains: Armadillo_seg

MW: 86.9 kDa

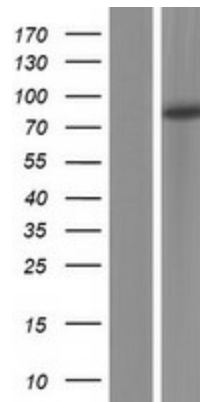
Gene Summary:

This gene encodes a member of the arm-repeat (armadillo) and plakophilin gene families. Plakophilin proteins contain numerous armadillo repeats, localize to cell desmosomes and nuclei, and participate in linking cadherins to intermediate filaments in the cytoskeleton. This protein may act in cellular desmosome-dependent adhesion and signaling pathways. Two transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Dec 2014]

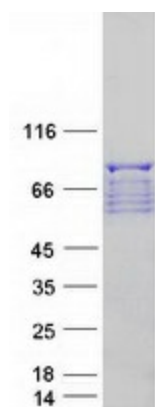
Product images:



Circular map for RC201001



Western blot validation of overexpression lysate (Cat# [LY416134]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC201001 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified PKP3 protein (Cat# [TP301001]). The protein was produced from HEK293T cells transfected with PKP3 cDNA clone (Cat# RC201001) using MegaTran 2.0 (Cat# [TT210002]).