

Product datasheet for **SC115670**

Plakophilin 3 (PKP3) (NM_007183) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Plakophilin 3 (PKP3) (NM_007183) Human Untagged Clone
Tag:	Tag Free
Symbol:	Plakophilin 3
Mammalian Cell Selection:	None
Vector:	<u>pCMV6-XL4</u>
E. coli Selection:	Ampicillin (100 ug/mL)



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Fully Sequenced ORF: >OriGene ORF within SC115670 sequence for NM_007183 edited (data generated by NextGen Sequencing)

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ATGCAGGACGGTAACTTCCTGCTGTCGGCCCTGCAGCCTGAGGCCGGCTGTGCTCCCTG
GCGCTGCCCTCTGACCTGCAGCTGGACCGCCGGGGCGCCGAGGGCCGGAGGCCGAGCGG
CTGCGGGCAGCCCGCTCCAGGAGCAGGTCCGCGCCCGCCTCTTGACAGCTGGGACAGCAG
CCGCGGCACAACGGGGCCGCTGAGCCCGAGCCTGAGGCCGAGACTGCCAGAGGCACATCC
AGGGGGCAGTACCACACCTGCAGGCTGGCTTCAGCTCTCGCTCAGGGCCTGAGTGGG
GACAAGACCTCGGGCTTCGGGCCATCGCCAAGCCGGCCTACAGCCAGCCTCCTGGTCC
TCCCGCTCCGCCGTGGATCTGAGCTGCAGTCGGAGGCTGAGTTACGCCCAACGGGGG
AGCGCCTTTGGGGCCGCTGGGTACGGGGGTGCCAGCCACCCTCCCATGCCACCAGG
CCCGTGTCTTCCATGAGCGCGGTGGGTTGGGAGCCGGGCCACTATGACACACTCTCC
CTGCGCTCGTGC GGCTGGGGCCCGGGGCTGGACGACCCTACAGCCTGGTGTCTGAG
CAGCTGGAGCCCGCGCCACCTCCACCTACAGGGCCTTTGCGTACGAGCGCCAGGCCAGC
TCCAGCTCCAGCCGGGCAGGGGGCTGGACTGGCCCGAGGCCACTGAGGTTTCCCGAGC
CGGACCATCCGTGCCCTGCCGTGCGGACCCTGCAGCGATTCCAGAGCAGCCACCGGAGC
CGCGGGTAGGGGGGAGTGGCCGGGGCCGCTCCTGGAGCCAGTGGCTCGAGCGCATCT
GTGCGCAGCCTCAGCCTCAGCCTGGCTGACTCGGGCCACCTGCCGGACGTGCATGGGTT
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CTGCCCTCAGCAGTCAAGTACCTCATGGCTTACAGCCCAACCTGCAGGTGCTGGGAGCG
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GCCACAGGTGCCATGCGCAACCTCATCTACGACAACGCTGACAACAAGCTGGCCCTGGT
GAGGAGAACGGGATCTTCGAGCTGCTGCGGACACTGCGGGAGCAGGATGATGAGCTTCGC
AAAAATGTCACAGGGATCCTGTGGAACCTTTCATCCAGCGACCCTGAAGGACCGCCTG
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CTAGACCGTGTGAGACCGCCGACCACCACAGCTGCGCTCACTGACTGGCCTCATCCGA
AACCTGTCTCGGAACGCTAGGAACAAGGACGAGATGTCCACGAAGTGGTGGAGCCACCTG
ATCGAGAAGCTGCCGGCAGCGTGGGTGAGAAGTCCGCCCCAGCCGAGGTGCTGGTCAAC
ATCATAGCTGTGCTCAACAACCTGGTGGTGGCCAGCCCATCGTGCCTGAGACCTGCTG
TATTTTGACGGACTCCGAAAGCTCATCTTCATCAAGAAGAAGCGGGACAGCCCGACAGT
GAGAAGTCTCCCGGGCAGCATCCAGCCTCCTGGCCAACCTGTGGCAGTACAACAAGCTC
CACCGTACTTCCGGGCAAGGGCTATCGGAAGGAGGACTTCTGGGCCATAG

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Clone variation with respect to NM_007183.2

5' Read Nucleotide Sequence: >OriGene 5' read for NM_007183 unedited
 NTAAGTTCAGGATTTTGTAAATACGACTCCACTATAGGCGGCGCGCAATTCGCACGAGG
 CCAGGCCAGGCCCGGTGGACCTGCCGCGTGCAGGGAGGGGAACCTCCTGCTGTCGGCCC
 TGCAGCCTGAGGCCGGCTGTGCTCCCTGGCGCTGCCCTTGACCTGCAGCTGGACCGCC
 GGGGCGCCGAGGGGCCGAGGCCGAGCGGCTGCGGGCAGCCCGCTCCAGGAGCAGGTCC
 GCGCCCGGGGGGCGAGCTGGGACAGCAGCCGCGGACAAACGGGGCCGCTGAGCCCGAGC
 CTGAGGCCGAGACTGCCAGAGGCACATCCAGGGGCGAGTACCACACCCTGCAGGCTGGCT
 TCAGCTCTGCTCTCAGGGCCTGAGTGGGACAAGACCTCGGGCTTCCGGCCCATCGCCA
 AGCCGGCCTACAGCCAGCCTCCTGGTCTCCCGCTCCGCGTGGATCTGAGCTGCAGTC
 GGAGGCTGAGTTCAGCCACAACGGGGCAGCGCCTTTGGGGCCGCTGGGTACGGGGGTG
 CCCAGCCACCCCTCCATGCCACCAGGCCCGTGTCTTCCATGAGCGCGGTGGGGTTG
 GGAGCCGGGCCGACTATGACACACTCTCCCTGCGCTCGTGCAGGCTGGGGCCCGGGCC
 TGGACGACCGCTACAGCCTGGTGTCTGAGCAGCTGGAGCCGCGGCCACCTCCACCTACA
 GGGGCTTTGCGTACGAGCGCCAGGCCAGCTCCAGCTCCAGCCGGCAGGGGGGTTGGA
 CTGGCCCGAGGCCACTGAGGGTCCCCGAGCCGGACATCCGTGGCCCTGGCGTGGCG
 ACCTGCGGCGATTCCAGAGCAGCCCCGACCCCGGGGAAGCCGGGCCATGCCCGGGC
 GCCTTCT

3' Read Nucleotide Sequence: >OriGene 3' read for NM_007183 unedited
 TTAACGTCCTATTAGNACCGCCGCACTTCTANGATCGATTTTTTTTTTTTTTTTTTTGAC
 TGTTTCATGGCCATCTTTATTTCCATGCTGGCTATCCCAAGAACTGCCAGGCCACAGCCAA
 CCCCCACCTCTGCCAATGTGACTGGGTACCACCCCATACACCAGAGCAGCCTTGAGCCC
 TGCCCCACCCCTGCCCTGCGGAAGCAAGTCCCAGCTATAAGACCCTGCCCTCCTGG
 TGGCCAGGACCCTCAAAGATGCACACAGGGGCCAGCGAGGGGCCCTCCGTCATTAG
 CCTTCTCCTCAGGCTGGGCTGCCAAGCAGCCTGGAGCTGAGTCTGTCCCTTGGACGCTG
 GGCCACGTACCTTCTCCTCCAGAAGGCTTACCTATGGGCCAGGAAGTCCCTCCTCCG
 ATAGCCCTTCGCCGGAAGTACGGTGGAGCTTGTGTACTGCCACAGGTTGGCCAGGAA
 GCTGGATGCTGCCCGGAGGACTTCTACTGTGCGGGCTGTCCCGCTTCTTGTGATGAA
 GATGAGCTTTCGGAGTCCGTAAAATACAGCAAGTCTCGGGCAGCGATGGGGCTGGCCAC
 CACCAGTGTGTTGAGCACAGCTATGATGTTGACCAGCACCTCGGCTGGGGGCGACTTCTC
 ACCACGCTGCCCGGAGCTTCTCGATCAGGTGGCTCACCACCTTCGTGGACATCTCGTC
 CTTGTTCCTAGCGTTCGAGACAGGTTTCGGATGATGCCAGTCAGTGAGCGCANCTGGTG
 GTGGTCGGCGGTCTGACACGGTCTAGCAAGGGTTTCAAGTACGCTCCTGCTCCAAGGC
 CA

Restriction Sites: NotI-NotI
ACCN: NM_007183
Insert Size: 2850 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](#)

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_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

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]

Transcript Variant: This variant (1) uses an alternate 5' exon structure and differs in the 5' UTR and coding region, compared to variant 2. The resulting isoform (PKP3a) has a shorter and distinct N-terminus compared to isoform PKP3b.