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Product datasheet for SC316289

Plakophilin 4 (PKP4) (NM_003628) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Plakophilin 4 (PKP4) (NM_003628) Human Untagged Clone
Tag:	Tag Free
Symbol:	Plakophilin 4
Synonyms:	p0071
Mammalian Cell Selection:	None
Vector:	pCMV6-XL5
E. coli Selection:	Ampicillin (100 ug/mL)

Fully Sequenced ORF:

>OriGene ORF within SC316289 sequence for NM_003628 edited (data generated by NextGen Sequencing)

ATGCCAGCTCCTGAGCAGGCCTCATTGGTGGAGGAGGGGCAACCACAGACCCGCCAGGAA
GCTGCCTCCACTGGCCCAGGCATGGAACCCGAGACCACAGCCACCACTATTCTAGCATCC
GTGAAGGAGCAGGAGCTTCAGTTTCAGCGACTCACCCGAGAACTGGAAGTGGAAAGGCAG
ATTGTTGCCAGTCAGCTAGAAAGATGTAGGCTTGGAGCAGAATCACCAAGCATCGCCAGC
ACCAGCTCAACTGAGAAGTCATTTCCTTGGAGATCAACAGACGTGCCAAATACTGGTGTA
AGCAAACCTAGAGTTTCTGACGCTGTCCAGCCCAACAACTATCTCATCAGGACAGAGCCA
GAACAAGGAACCCTCTATTCACCAGAACAGACATCTCTCCATGAAAGNNNNNGATCATTG
GGTAACTCAAGAAGTTCAACACAAATGAATTCTTATTCCGACAGTGGATACCAGGAAGCA
GGGAGTTTCCACAACAGCCAGAACGTGAGCAAGGCAGACAACAGACAGCAGCATTCATTC
ATAGGATCAACTAACAACCATGTGGTGAGGAATTCAAGAGCTGAAGGACAAACACTGGTT
CAGCCATCAGTAGCCAATCGGGCCATGAGAAGAGTTAGTTCAGTTCCATCTAGAGCACAG
TCTCCTTCTTATGTTATCAGCACAGGCGTGTCTCCTTCAAGGGGGTCTCTGAGAACTTCT
CTGGGTAGTGGATTTGGCTCTCCGTCAGTGACCGACCCCCGACCTCTGAACCCCAGTGCA
TATTCCTCCACCACATTACCTGCTGCACGGGCAGCCTCTCCGTACTCACAGAGACCCGCC
TCCCCAACAGCTATACGGCGGATTGGGTCAGTCACCTCCCGGCAGACCTCCAATCCCAAC
GGACCAACCCCTCAATACCAAACCACCGCCAGAGTGGGGTCCCCACTGACCCTGACGGAT
GCACAGACTCGAGTAGCTTCCCCATCCCAAGGCCAGGTGGGGTCGTCGTCCCCCAAACGC
TCAGGGATGACCGCCGTACCACAGCATCTGGGACCTTCACTGCAAAGGACTGTTCATGAC
ATGGAGCAATTCGGACAGCAGCAGTATGACATTTATGAGAGGATGGTTCCACCCAGGCCA
GACAGCCTGACAGGCTTACGGAGTTCCTATGCTAGTCAGCATAGTCAGCTTGGGCAAGAC
CTTCGTTCTGCCGTGTCTCCCGACTTGCACATTACTCCTATATATGAGGGGAGGACCTAT
TACAGCCCAGTGTACCGCAGCCCAAACCATGGAACTGTGGAGCTCCAAGGATCGCAGACG
GCGTTGTATCGCACAGGTTCAGTAGGTATTGGAAATCTACAAAGGACATCCAGCCAACGA
AGTACCCTTACATACCAAAGAAATAATTATGCTCTGAACACAACAGCTACCTACGCGGAG
CCCTACAGGCCTATACAATACCGAGTGCAAGAGTGCAATTATAACAGGCTTCAGCATGCA

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GTGCCGGCTGATGATGGCACCACAAGATCCCCATCAATAGACAGCATTCAGAAGGACCCC
AGGGAGTTTGCCTGGCGTGATCCTGAGTTGCCTGAGGTCATTCACATGCTTCAGCACCAG
TTCCCATCTGTTCAGGCAAATGCAGCGGCCTACCTGCAGCACCTGTGCTTTGGTGACAAC
AAAGTGAAGATGGAGGTGTGTAGGTTAGGGGGAATCAAGCATCTGGTTGACCTTCTGGAC
CACAGAGTTTTGGAAGTTCAGAAGAATGCTTGTGGTGCCCTTCGAAACCTCGTTTTTGGC
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CGACTGTTGAGAAAATCTATTGATGCAGAAGTAAGGGAGCTTGTTACAGGAGTTCTTTGG
AATTTATCCTCATGTGATGCTGTAAAAATGACAATCATTCGAGATGCTCTCTCAACCTTA
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AGCTCCGCGGGGGAAGAAGCTCGGAAGCAAATGCGGTCCTGCGAGGGGCTGGTAGACTCA
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AACTGCGTGTGCACCCTGAGGAACCTGTCCTATCGGCTGGAGCTGGAGGTGCCCCAGGCC
CGGTTACTGGGACTGAACGAATTGGATGACTTACTAGGAAAAGAGTCTCCCAGCAAAGAC
TCTGAGCCAAGTTGCTGGGGGAAGAAGAAGAAAAAGAAAAAGAGGACTCCGCAAGAAGAT
CAATGGGATGGAGTTGGTCCTATCCCAGGACTGTCGAAGTCCCCCAAAGGGGTTGAGATG
CTGTGGCACCCATCGGTGGTAAAACCATATCTGACTCTTCTAGCAGAAAGTTCCAACCCA
GCCACCTTGGAAGGCTCTGCAGGGTCTCTCCAGAACCTCTCTGCTGGCAACTGGAAGTTT
GCAGCATATATCCGGGCGGCCGTCCGAAAAGAAAAGGGGCTCCCCATCCTTGTGGAGCTT
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CTAGATGTTCGCAACAAGGAGCTCATAGGCAAATACGCCATGCGAGACCTGGTCAACCGG
CTCCCCGGCGGCAATGGCCCCAGTGTCTTGTCTGATGAGACCATGGCAGCCATCTGCTGT
GCTCTGCACGAGGTCACCAGCAAAAACATGGAGAACGCAAAAGCCCTGGCCGACTCAGGA
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GACCGATTCAAATCACATCCTTCCTTGTCTACCACCAACCAACAGATGTCACCCATCATT
CAGTCAGTCGGCAGCACCTCTTCCTCACCAGCACTGTTAGGAATCAGAGACCCTCGCTCT
GAATACGATAGGACCCAGCCACCTATGCAGTATTACAATAGCCAAGGGGATGCCACACAT
AAAGGCCTGTACCCTGGCTCCAGCAAACCTTCACCAATTTACATCAGTTCCTATTCCTCA
CCAGCAAGAGAACAAAATAGACGGCTACAGCATCAACAGCTGTATTATAGTCAAGATGAC
TCCAACAGAAAGAACTTTGATGCATACAGATTGTATTTGCAGTCTCCTCATAGCTATGAA
GATCCTTATTTTGATGACCGAGTTCACTTTCCAGCTTCTACTGATTACTCAACACAGTAT
GGACTGAAATCGACCACAAATTATGTAGACTTTTATTCCACTAAACGACCTTCTTATAGA
GCAGAACAGTACCCAGGGTCCCCAGACTCATGGGTGTAG

Clone variation with respect to NM_003628.3
408 t=>n;409 g=>n;410 a=>n;411 g=>n;412 g=>n

5' Read Nucleotide Sequence:

>OriGene 5' read for NM_003628 unedited
TCAACTTGTATACGACTCCTATAGGGCGGCCGCGAATTCGGCACGAGGCCCTGCTCCCTG
GAGCGACGACGGCCGCTGCCTAAGCTGGAAAGAGGAATGCCAGCTCCTGAGCAGGCCTCA
TTGGTGGAGGAGGGGCAACCACAGACCCGCCAGGAAGCTGCCTCCACTGGCCCAGGCATG
GAACCCGAGACCACAGCCACCACTATTCTAGCATCCGTGAAGGAGCAGGAGCTTCAGTTT
CAGCGACTCACCCGAGAACTGGAAGTGGAAAGGCAGATTGTTGCCAGTCAGCTAGAAAGA
TGTAGGCTTGGAGCAGAATCACCAAGCATCGCCAGCACCAGCTCAACTGAGAAGTCATTT
CCTTGGAGATCAACAGACGTGCCAAATACTGGTGTAAGCAAACCTAGAGTTTCTGACGCT
GTCCAGCCCAACAACTATCTCATCAGGACAGAGCCAGAACAAGGAACCCTCTATTCACCA
GAACAGACATCTCTCCATGAAAGATCATTGGGTAACTCAAGAAGTTCAACACAAATGAAT
TCTTATTCCGACAGTGGATACCAGGAAGCAGGGAGTTTCCACAACAGCCAGAACGTGAGC
AAGGCAGACAACAGACAGCAGCATTCATTCATAGGATCAACTAACAACCATGTGGTGAGG
AATTCAAGAGCTGAAGGACAAACACTGGTTCAGCCATCAGTAGCCAATCGGGCCATGAGA
AGAGTTAGTTCAGTTCCATCTAGAGCACAGTCTCCTTCTTATGTTATCAGCACAGGCGTG
TCTCCTTCAAGGGGTCTCTGAGAACTTCTCTGGGTAGTGGATTTGGCTCTCCGTCAGTGA
CCGACCCCCGACCTCTGAACCCCAGTGCATATTCCTCACCACATTACCTGCTGCACGGGC
AGGCCTCTCCGTACTCACAGAGACCCGGCTTCCCA

3' Read Nucleotide Sequence:

>OriGene 3' read for NM_003628 unedited
CTTACCCCATCCTGCACCCGTTAGCTAGCAAGAGTTCCTCTGTTGGGCATCTTGATGCTA
CACCCATGAGTCTGGGGACCCTGGGTACTGTTCTGCTCTATAAGAAGGTCGTTTAGTGGA
ATAAAAGTCTACATAATTTGTGGTCGATTTCAGTCCATACTGTGTTGAGTAATCAGTAGA
AGCTGGAAAGTGAACTCGGTCATCAAAATAAGGATCTTCATAGCTATGAGGAGACTGCAA
ATACAATCTGTATGCATCAAAGTTCTTTCTGTTGGAGTCATCTTGACTATAATACAGCTG
TTGATGCTGTAGCCGTCTATTTTGTTCTCTTGCTGGTGAGGAATAGGAACTGATGTAAAT
TGGTGAAGGTTTGCTGGAGCCAGGGTACAGGCCTTTATGTGTGGCATCCCCTTGGCTATT
GTAATACTGCATAGGTGGCTGGGTCCTATCGTATTCAGAGCGAGGGTCTCTGATTCCTAA
CAGTGCTGGTGAGGAAGAGGTGCTGCCGACTGACTGAATGATGGGTGACATCTGTTGGTT
GGTGGTAGACAAGGAAGGATGTGATTTGAATCGGTCTCGCTCCAATGTCGACACAGGTGT
AATAAAATGGTTCTGATTCCACCCATCCTTTTTATAAATGCTCCGGAGTCCCGATATTGC
CATAATGTATTCAAGACCTGGCTGCTGCCTTCACCACTTTCAGAGATGATCTGTCGCCCC
TGCCTTTGGTTATGTTCACCAGCTTCTCTATGCCTCCTGAGTCGGCCAGGGCTTTTGCGT
TCTCCATGTTTTTGCTGGTGACCTCGTGCAGAGCACAGCAGATGGCTGCCATGGTCTCAT
CAGACAGACACTGGGCCATTGCCGCCGGGGAGCCGGTGACCAGTCCTCGCATGGCGTATT
TGCCTATTGAGCTCC

Restriction Sites: Please inquire

ACCN: NM_003628

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 TrueClone is provided through our Custom Cloning Process that includes sub-cloning into OriGene's pCMV6 vector and full sequencing to provide a non-variant match to the expected reference without frameshifts, and is delivered as lyophilized plasmid DNA.
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_003628.3, NP_003619.2
RefSeq Size:	4604 bp
RefSeq ORF:	3579 bp
Locus ID:	8502
UniProt ID:	Q99569
Cytogenetics:	2q24.1
Domains:	Armadillo_seg

Gene Summary: Armadillo-like proteins are characterized by a series of armadillo repeats, first defined in the Drosophila 'armadillo' gene product, that are typically 42 to 45 amino acids in length. These proteins can be divided into subfamilies based on their number of repeats, their overall sequence similarity, and the dispersion of the repeats throughout their sequences. Members of the p120(ctn)/plakophilin subfamily of Armadillo-like proteins, including CTNND1, CTNND2, PKP1, PKP2, PKP4, and ARVCF. PKP4 may be a component of desmosomal plaque and other adhesion plaques and is thought to be involved in regulating junctional plaque organization and cadherin function. Multiple transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Feb 2015]
Transcript Variant: This variant (1) represents the longest transcript and encodes the longest isoform (a).