

Product datasheet for **SC117285**

Plakophilin 2 (PKP2) (NM_004572) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Plakophilin 2 (PKP2) (NM_004572) Human Untagged Clone
Tag:	Tag Free
Symbol:	Plakophilin 2
Synonyms:	ARVD9
Mammalian Cell Selection:	None
Vector:	<u>pCMV6-XL4</u>
E. coli Selection:	Ampicillin (100 ug/mL)



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Fully Sequenced ORF: >NCBI ORF sequence for NM_004572, the custom clone sequence may differ by one or more nucleotides

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ATGGCAGCCCCGGCGCCAGCTGAGTACGGCTACATCCGGACCGTCTGGGCCAGCAGATCCTGGGAC
AACTGGACAGCTCCAGCCTGGCGCTGCCCTCCGAGGCCAAGCTGAAGCTGGCGGGGAGCAGCGGCCGCG
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AAAATGATTTTGTGGAGGCCGTTCCCTGTTCTAAAACCTATGACATGCTAAAGGCTGGCACAACCTGC
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CCTCTAGTGCCACCGAGATATGCTCGTCCGAGATCGTGGGGTTCAGCCGTGCTGGCACCACAAGCAGG
CAGCGCCACTTTGACACATACCACAGACAGTACCAGCATGGCTCTGTTAGCGACACCGTTTTTGACAGCA
TCCCTGCCAACCCGGCCCTGCTCAGTACCCAGGCCAGGGACCAGCCGACAGTGGGCAACCTCTTGGA
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ACTCAGAACAGGGCTTCCAGTCTCCTGGCATCAGAGTCTTCCACAGCACCCGCACGCTGAGGGAAG
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AGACAGATTTTGTCAACAGCCGACTGCCAAAGCCTACCACTCCCTTAAAGACTGA
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5' Read Nucleotide Sequence:	>OriGene 5' read for NM_004572 unedited NTTTTTCGNAATTATGTATACGAACTACTATAGGGCGGCCGCGAATTCGCACGAGGCAG CTCGGTCGCCCCACCGGCCCATGGCAGCCCCGGCGCCCGAGCTGAGTACGGCTACAT CCGGACCGTCTGGGCCAGCAGATCCTGGGACAACCTGGACAGCTCCAGCCTGGCGCTGCC CTCCGAGGCCAAGCTGAAGCTGGCGGGAGCAGCGGCCGCGCGGCCAGACAGTCAAGAG CCTGCGGATCCAGGAGCAGGTGCAGCAGACCCTCGCCCGAAGGGCCGCAGCTCCGTGGG CAACGAAATCTTCACCGAACCCAGCAGTGTTCCTGAGTATGTCTACAACCTACACTTGGT TGAATAATGATTTTGGAGGCCGTTCCCTGTTCTAAAACCTATGACATGCTAAAGGC TGGCACAACCTGCCACTTATGAAGTTCGCTGGGGAAGAGGAACAGCACAGTACAGCTCCCA GAAGTCCGTGGAAGAAAGGTCTTGAGGCATCCTCTGAGGAGACTGGAGATTTCTCTGA CAGCAGCCCGGAGAGGGCTCACTACACGCACAGCGATTACAGTACAGCCAGAGAAGCCA GGCTGGGCACACCCTGCACCACCAAGAAAGCAGGCGGGCCGCCCTCTAGTGCCACCGAG ATATGCTCGTTCGAGATCGTGGNGTCAAGCGTGTGGCACCACAAGCAGGCAGCGCCA CTNTGACACATACCACAGACAGTACCAGCATGGCTCTGTTAGCGACACCGTTTTTGACAG CATCCCTGCCAACCCGGCCCTGCTCACGTACCCCGAGCCAGGGACCAGCCGCAGCATGGG CAACCTCTGGNAGAAGGAGAACTACCTCGACGCAGGNCTCACTGTCCGCCAGTACAGCC GCTGGTGGCCCTGCAGCCGTCACTCAGAACAGGCTTTCAGTCTCTGGCATAAC
3' Read Nucleotide Sequence:	>OriGene 3' read for NM_004572 unedited TACCTAGTTCNNGTCNAGGTCGAGTTTATTACTTTTTTTTTTAAATTATCGAATGCTTT ATTAATGCCTTAAAAACACAAAAGTTCTGAACACACATTTATTATCTGGAGGAATAAAT GCACTCCAAATGCTTATCATCAGAACTCTGGAAAAAGAATATAAATTCTCTCCAGTATTT TAAAAATTGGTATCTAAATAATTGCGGTGGAACTAGTTAGCAACCTAAGTTGGCTTCA TTCAGCTTTTAAATGAAAAAAATTGCTTCAAATATAATAAAGACTTAAGTACACATT CAAAAATTTATTTCTGTTACAGTTTTCTTGCCAAAAGGAGTTGAAGAATTTTTTGTCTA TCTTACTTAGGACAAATGTTGTGACAGTAAAAAATAACAGAAATAGTAGTTGTAAA GACTAACTCTATATGAATGGTCTAATCATAGCGCAGTAAAAACAACATTTAATGTACAT TCATTTGCTGGATGATGCACCCATTTAAATATCACGATTTCCCATATCATCGCTGGA TGGTCTTGACACATTCTACATCTTTTCAACATGACTTCTTCCACTTTCTTCTCTAGA GTTTTTCTGAGTTAAAAACTGGTCTTGCAGAAAACATTTGCCATCCAGCGGCCCGCGCA TATTTGTTAACCGCGGGCAAGGCTGCGCTGGCTGCCATGCCCTCATTATCCTGAAC CCGCTTTCCCGCCCGCCAGCTGGCCCCCTCCCTGTTCCCGGTCTCCCTCCTTTTCCC CCTCCCATTGATTCTTCTTTTCTATTCCCGCCTCGCCCCCGACCCCCACCCGCC TCCGTCTATCCCCGCGCGACCATATGCCCCACGTTTCTTTCCCGCCTCCCTTC CCCCATTGTCTTTTTTTTCTGCCCCCCCCCGTCCCTTTCCGCCCTTTTGTTC TTCCCCCTCAATCCACACTAA
Restriction Sites:	NotI-NotI
ACCN:	NM_004572
Insert Size:	4230 bp
OTI Disclaimer:	Our molecular clone sequence data has been matched to the reference identifier above as a point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative RNA splicing form or single nucleotide polymorphism (SNP).
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_004572.2](#), [NP_004563.1](#)

RefSeq Size: 4439 bp

RefSeq ORF: 2646 bp

Locus ID: 5318

UniProt ID: [Q99959](#)

Cytogenetics: 12p11.21

Domains: Armadillo_seg

Protein Pathways: Arrhythmogenic right ventricular cardiomyopathy (ARVC)

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 gene product may regulate the signaling activity of beta-catenin. Two alternately spliced transcripts encoding two protein isoforms have been identified. A processed pseudogene with high similarity to this locus has been mapped to chromosome 12p13. [provided by RefSeq, Jul 2008]

Transcript Variant: This transcript variant (2b) represents the longer transcript variant and encodes the longer isoform.