

Product datasheet for **RG218592**

Plakophilin 2 (PKP2) (NM_004572) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Plakophilin 2 (PKP2) (NM_004572) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Plakophilin 2
Synonyms:	ARVD9
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



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ORF Nucleotide Sequence:

>RG218592 representing NM_004572
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGGCAGCCCCGGCCCCAGCTGAGTACGGCTACATCCGGACCGTCTGGGCCAGCAGATCTGGGAC
 AACTGGACAGCTCCAGCCTGGCGCTGCCCTCCGAGGCCAAGCTGAAGCTGGCGGGGAGCAGCGGCCGCGG
 CGGCCAGACAGTCAAGAGCCTGCGGATCCAGGAGCAGGTGCAGCAGACCCTCGCCCGGAAGGGCCGAGC
 TCCGTGGGCAACGGAAATCTTACCGAACCAGCAGTGTTCCTGAGTATGTCTACAACCTACACTTGGTTG
 AAAATGATTTTGTGGAGGCCGTTCCCCTGTTCTAAAACCTATGACATGCTAAAGGCTGGCACAACCTGC
 CACTTATGAAGGTCGCTGGGGAAGAGGAACAGCACAGTACAGCTCCAGAAGTCCGTGGAAGAAAGGTCC
 TTGAGGCATCCTCTGAGGAGACTGGAGATTTCTCCTGACAGCAGCCGGAGAGGGCTCACTACACGCACA
 GCGATTACAGTACAGCCAGAGAAGCCAGGCTGGGCACACCCTGCACCACCAAGAAAGCAGGCGGGCCGC
 CCTCCTAGTGCCACCGAGATATGCTCGTCCGAGATCGTGGGGTCCAGCCGTGCTGGCACCACAAGCAGG
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 TCCTTGCCAACCCGGCCCTGCTCACGTACCCAGGCCAGGGACCAGCCGAGCATGGGCAACCTCTTGGA
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 ACTCAGAACAGGGCTTCCAGGTCCTCCTGGCATCAGAGCTCCTTCCACAGCACCCGACCGCTGAGGGAAG
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 GGAAGTGGGAATCTGCTCACTGAGAGAAGCACTTTCAGTACTCCAGCTGGGGAATGCAGACATGGAG
 ATGACTCTGGAGCGAGCAGTGTGATGCTCGAGGCAGACCACATGCCCCATCCAGGATTTCTGTCGAG
 CTACTTTACAGCAGCAGTGTCTCCAGAAATCTGAAGCTCGGAAGAGGGTTAACAGCTTCGTGGCAT
 CCTCAAGCTTCTGAGCTCCTAAAAGTTGAGAATGAAGACGTTCCAGCAGCTGTGTGGGGCCTTGAGA
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 AACTCAAGAATCTCATGATAACAGAAGCATTGCTTACGCTGACGGAGAATATCATCATCCCTTTTCTGG
 GTGGCCTGAAGGAGACTACCCAAAAGCAAATGGTTTGTGCTGATTTGACATATTCTACAACGCTACTGGA
 TGCCCTAAGAAACATGAGTTCTGCTGGCGCTGATGGGAGAAAAGCGATGAGAAGATGTGACGGACTCATTG
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 AGACAGATTTTGTCAACAGCCGGACTGCCAAAGCCTACCACTCCCTTAAAGAC

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence: >RG218592 representing NM_004572
 Red=Cloning site Green=Tags(s)

MAAPGAPAEYGYIRTVLGQQILGQLDSSSLALPSEAKLKLKAGSSGRGGQTVKSLRIQEQQVQQLARKGRS
 SVGNLHRTSSVPEYVYNLHLVENDFVGGSPVPKTYDMLKAGTTATYEGRWGRGTAQYSSQKSVEERS
 LRHPLRRLEISPDSSEPERAHYTHSDYQYSQRSQAGHTLHHQESRRAALLVPPRYARSEIVGVSRAQTTSR
 QRHFDTYHRQYQHGSVSDTVFDSIPANPALLTYPRPGTSRSMGNLLEKENYLTAGLTVGQVRPLVPLQPV
 TQNRASRSSHQSSFHSTRTLREAGPSVAVDSSGRRRAHLTVGQAAAGSGNLLTERSTFTDSQLGNADME
 MTLERAVSMLLEADHMPPSRISAAATFIQHECFQKSEARKRVNQLRGILKLLQLLKVNEDVQRAVCGALR
 NLVFEDNDNKLEVAELNGVPRLLQVLKQTRDLETKKQITDHTVNLRSRNGWPGAVAHACNPSTLGGQGG
 ITRSGVRDQPDQHGLLWNLSSNDKLNLMITEALLTLTENIIPFSGWPEGDYPKANGLLDFDIFYNVTG
 CLRNMSAGADGRKAMRRCDGLIDSLVHYVRGTIADYQPDKATENCVCILHNL SYQLEAELPEKYSQNI
 YIQNRNIQTDNNKSI GCFGSRSRKVKQYQDVPMPPEEKS NPKGVEWLWHSIVIRMYLSLIAKSVRNYTQE
 ASL GALQNL TAGSGMPMPT SVAQT VVQKESGLQHTRKMLHVGDP SVKKT AISLLRNL SRNLSLQNEIAKET
 LPDLVSIIPDTPSTDLLIETTASACYTLNIIQNSYQNARDLLNTGGIQKIMAI SAGDAYASNKASKAA
 SVLLYSLWAHTELHHAYKKAQFKKTDVNSRTAKAYHSLKD

TRTRPLE - GFP Tag - V

Restriction Sites:

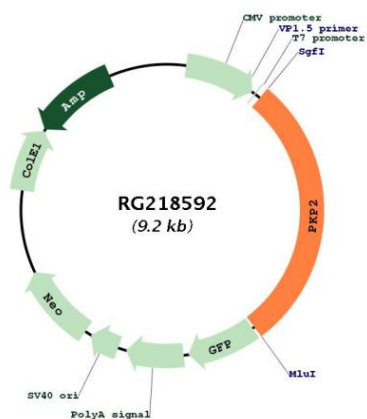
SgfI-MluI

Cloning Scheme:



ACCN:	NM_004572
ORF Size:	2643 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:	<ol style="list-style-type: none">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:	4431 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]

Product images:



Circular map for RG218592