

Product datasheet for **RG216972**

Plakophilin 1 (PKP1) (NM_001005337) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Plakophilin 1 (PKP1) (NM_001005337) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	PKP1
Synonyms:	B6P; EDSFS
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



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ORF Nucleotide Sequence:

>RG216972 representing NM_001005337
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCCCGCATCGCC

ATGAACCACTCGCCGCTCAAGACCCTTGGCGTACGAATGCTTCCAGGACCAGGACAACCTCCAGTTGG
 CTTTGCCGTCGGACCAAAGATGAAAACAGGCAGTCTGGCAGGCAGCGGTGCAGGAGCAGGTGATGAT
 GACCGTCAAGCGGCAGAAGTCCAAGTCTTCCAGTCGTCACCCTGAGCCACTCCAATCGAGTTCCATG
 TATGATGGCTTGGCTGACAATTACAACATATGGGACCACCAGCAGGAGCAGCTACTACTCCAAGTTCCAGG
 CAGGGAATGGCTCATGGGATATCCGATCTACAATGGAACCTCAAGCGGGAGCCTGACAACAGGCGCTT
 CAGCTCTACAGCCAGATGGAGAAGTGGAGCCGGCACTACCCCGGGCAGCTGTAAACACCACCGGCGCA
 GGCAGCGACATCTGCTTCATGCAGAAAATCAAGGCGAGCCGAGTGAGCCCGACCTCTACTGTGACCCAC
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 CAGCACCTGCAGTGGTCAGAAGGCCATAAAGAAGTGCCCTGTGCGCCCGCCTCTTGTGCTCCAAGCAG
 GACCCTGTGTATATCCCGCCATCTCCTGCAACAAGGACCTGTCTTTGGCCACTTAGGGCCAGCTCCA
 AGATCTGCAGTGAGGACATCGAGTGCAGTGGGCTGACCATCCCCAAGGCTGTGCAGTACCTGAGCTCCCA
 GGATGAGAAGTACCAGGCCATTGGGGCCTATTACATCCAGCATACCTGCTTCCAGGATGAATCTGCCAAG
 CAACAGGTCTATCAGCTGGGAGGCATCTGCAAGCTGGTGGACCTCCTCCGAGCCCAACCCAGAAGCTCC
 AGCAGGGCCGCGGAGGGCCCTGCGCAACCTGGTGTTCAGGAGCACCACCAAGCTGGAGACCCGGAG
 GCAGAAATGGGATCCGCGAGGCAGTCAGCCTCCTGAGGAGAACCGGAACCGCGAGATCCAGAAGCAGCTG
 ACTGGGCTGCTCTGGAACCTGTCTTCCACTGACGAGCTGAAGGAGGAACCTATTGCCGACGCCCTGCCTG
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 TGGCCAAGCAGTACTTCTCCAGCAGCATGCTCAACAACATCATCAACCTGTGCCGAAGCAGTGCCTCACC
 CAAGGCCGCAAGCTGCCCGGCTTCTCCTGTCTGACATGTGGTCCAGCAAGGAAGTGCAGGGTGTCTC
 AGACAGCAAGGTTTCGATAGGAACATGCTGGGAACCTTAGCTGGGGCCAACAGCCTCAGGAACCTCACCT
 CCCGATT

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence: >RG216972 representing NM_001005337
 Red=Cloning site Green=Tags(s)

MNHSPLKTALAYECFQDQDNSTLALPSDQKMKGTSGRQRVQEQVMMTVKRQKSKSSQSSTLSHSNRGSM
 YDGLADNYNYGTTSSSSYYSKFQAGNGSWGYPINYGLKREPDNRRFSSYSQMENWSRHYPRGSCNTTGA
 GSDICFMQKIKASRSEPDLYCDPRGTLRKGTLSKGGKQTTQNRYSFYSTCSGQKAIKKCPVRPPSCASKQ
 DPVYIPIISCNKDLSFGHSRASSKICSEDI ECSGLTIPKAVQYLSQDEKYQAIGAYYIQTCTCFQDESAK
 QQVYQLGGICKLVDLLRSPNQNVQAAAGALRNLVFRSTTNKLETRRQNGIREAVSLLRRTGNAEIQKQL
 TGLLWNLSSSTDELKEELIADALPVLADRVIIIPFSGWCDGNSNMSREVVDPEVFFNATGCLRNLSSADAGR
 QTMRNYSGLIDSLMAYVQNCVAASRCDKSVENCMCVLHNL SYRLDAEVPTRYRQLEYNARNAYTEKSSST
 GCFSNKSDKMMNNYDCPLPEEETNPKGSGWL YHSDAIRTYLNL MGKSKKDATLEACAGALQNL TASKGL
 MSSGMSQLIGLKEKGLPQIARLLQSGNSDVVRSGASLLSNMSRHPLLHRVMGNQVFPVTRLLTSHTGNT
 SNSEDI LSSACYTVRNL MASQPQLAKQY FSSSMLNNI INL CRSSASPAAEAARLLLSDMWSSKELQGVL
 RQQGFRNMLGLTAGANSLRNFTSRF

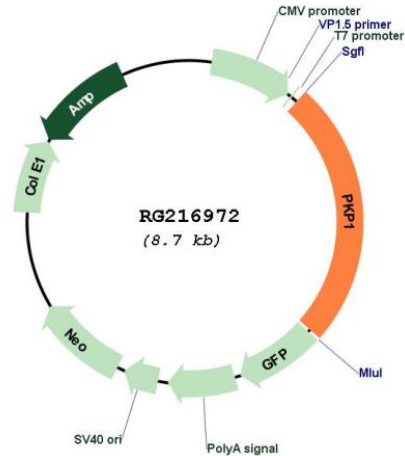
TRTRPLE - GFP Tag - V

Restriction Sites: SgfI-MluI

Cloning Scheme:

Cloning sites used for ORF Shutting:



Plasmid Map:


ACCN: NM_001005337

ORF Size: 2178 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:

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_001005337.3](#)

RefSeq Size: 5388 bp

RefSeq ORF: 2181 bp

Locus ID: 5317

UniProt ID: [Q13835](#)

Cytogenetics: 1q32.1

Protein Families: Druggable Genome

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 be involved in molecular recruitment and stabilization during desmosome formation. Mutations in this gene have been associated with the ectodermal dysplasia/skin fragility syndrome. Two transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Jul 2010]