

Product datasheet for **RG218100**

PDPR (NM_017990) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Tag:	TurboGFP
Symbol:	PDPR
Synonyms:	PDP3
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



ORF Nucleotide Sequence: >RG218100 representing NM_017990
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAAACGACTCACTATAGGCGGCCGGGAATTCGTGCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCCGCGATCGCC

ATGATGTTCTACCGTTGCTGTCGATTGTTGGAAGACAAAGAGCCAGCCAGGATGGCAGAACTGGTCTT
 CTGCAAGAAACAGCACGTGAGTCCGAGGCGCTTCCATGGCCCTGCCACCCAGGCACAGGTGGTCAT
 CTGTGGAGGTGGAATCACGGGCACTTCTGTGGCCTATCACCTCTCCAAAATGGGGTGAAGGATATTGTC
 CTTTGGAGCAGGGCAGGCTGGCTGCTGGCTCTACCAGGTTCTGTGCTGGCATCCTGAGCACTGCCAGGC
 ACTTGACCATTTAGCAGAAGATGGCAGACTACTCAAACTCTACTATCAGTTAGAGCAAGAAACAGG
 GATCCAAACAGGTTACACAAGGACAGGCTCAATCTTTCTGGCCAACTCAGGACCGACTGATCTCCCTG
 AAGCGCATCAACGAGGCTGAATGTTATAGGTATCCCTTCTGAGATCATCTCCCCAAGAAAGTGGCCG
 AGCTTACCCTCTCTCAACGTGCACGACCTGGTGGGGCCATGCATGTTCCCGAGGATGCAGTGGTGTC
 TTCCGCTGACGTGGCTTTGCCCTGGCAAGTGTGCTCCCAAAATGGTGTTCAGATCTATACCGGACA
 TCTGTTCTTTCATGTAATGGTCAAAAAGGTCAAGTTACTGGAGTGGAGACCGATAAAGGACAGATTGAAT
 GCCAGTATTTTGTCAACTGTGCTGGCCAGTGGGCATACGAGCTGGGTCTGTCCAACGAGGAGCCGGTTAG
 TATCCCGCTACATGCCGCGAACACTTCTACCTCTGACTCGCCCCCTGGAGACCCCTCTGCAGAGCAGC
 ACACCAACTATTGTGGATGCTGATGGAAGAATTTATATTGGAAGTGGCAGGGTGGCATCCTGTCTGGGG
 GCTTTGAGAAGAACCAGCAACCAATTTTCACTGAGGGCAAGAACAGCTGGAGATTCAGAATCTACAGGA
 AGACTGGGATCACTTTGAGCCTCTGTTGAGTTCCTTCTGAGGAGGATGCCAGAATTAGAGACTCTGGAG
 ATCATGAAGTTGGTGAAGTCCAGAGACCTTACACCCAGACATGAGGTGCATCATGGGCGAGTCTCCTG
 CAGTGCAGGGCTACTTTGCTGGCAGGAATGAAGTCTGCTGGCTTTTCAATTTGGTGGAGGAGCCGGA
 GTACCTTGCCGAATGGATGGTACATGGTTATCCCTCAGAAAACGTTTGGGAATTGGACCTGAAACGTTTT
 GGAGCCCTCCAGAGCAGCCGACCTTTCTGCGCCACCGGGTCATGGAAGTCATGCCTTTGATGTATGATC
 TGAAGGTTCCCGCTGGGACTTCCAGACCGGTAGGCAGTTACGCACCTCTCCTCTACGACCGGCTGGA
 TGCACAGGGAGCCAGGTGGATGGAGAAACATGGATTGAGAGGCCAAAGTACTTTGTTCCCCCGACAAG
 GACCTCCTGGCATTGGAGCAGAGCAAGACTTTCTATAAGCCAGATTGGTTTGACATCGTGGAGTCTGAAG
 TCAAGTGTGTAAGGAAGCTGTGTGTGTCATTGACATGTCCTCTTTCACAAAGTTTGAAGATAACATCCAC
 TGGGGATCAGGCATTAGAAGTTCTACAGTACCTCTTCTCCAATGACCTGGATGTGCCTGTGGGCCACATT
 GTGCATACTGGCATGCTCAACGAGGTGGAGGGTATGAAATGACTGCAGCATAGCAGCACTGAACAAGC
 GCAGTTTCTTCATGATCTCTCAACCGACAGCAGGTCCACTGTTGGGCTGGCTTAAGAAACACATGCC
 GAAAGACAGCAACCTGCTCCTGGAGACGTACCTGGAAGTACACAGCCCTCAATCTGATTGGCCCTCGA
 GCTGTGGATGTGCTGTCTGAGTTGTCTATGCCCTATGACTCCAGACCACTTCCCAAGCCTCTTTTGCA
 AGGAGATGAGTGTGGCTATGCAAAATGGGATCCGGGTGATGAGCATGACGCACACAGGAGAGCCAGGATT
 CATGCTCTACATCCCCATAGAGTACGCCCTGCATGTATACAATGAAGTGATGAGTGTGGCCAGAAATAC
 GGAATCCGGAATGCTGGGTATTACGCTCTTCGCAAGTCTCCGAATTGAGAAGTTTTTGCCTTCTGGGGTC
 AGGATATAAATAACCTCACACGCCCTGGAATGTGGACGAGAGTCTCGGGTGAATTAGAGAAGGGCAT
 GGATTTTCAATGGTTCGACGCCCTCTGCAGCAGAAGCAGAATGGAGTGTATAAACGCCTCACCATGTTT
 ATCCTGGACGACCATGATTACAGCTTAGACCTTTGGCCTTGGTGGGAGAGCCATTACCGGAATGGGC
 AGTATGTTGGCAAGACCACAGCAGTGCCTACAGCTACAGCTGGAGCGCCACGTTTGCCTGGGCTTTGT
 GCACAATTTTTCTGAGGACACGGGGAAGAGCAAGTGGTGACAGCAGATTTATCAACCGGGGAGAGTAT
 GAGATTGACATCGCGGATACCGCTTCCAGGCCAAGGCCAAGCTCTACCTGTGCGCTCCCTCTTACCC
 AGAAGCGCCGAAAGGATGACATGGAGCTGAGTGACTTACATGGGAAG

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence:

>RG218100 representing NM_017990

Red=Cloning site Green=Tags(s)

MMFYRLLSIVGRQASPGWQNWSSARNSTSAAEARSMLPTQAQVVICGGGITGTSVAYHLSKMGWKDIV
LLEQGRLAAGSTRFCAGILSTARHLTIEQKMADYSNKLYYQLEQETGIQTGYTRTGSIFLAQTQDRLLISL
KRINAGLNVIGIPSEIISPKKVAELHLLNVHDLVGAMHVPEDAVVSSADVALALASAASQNGVQIYDRT
SVLHVMVKKQVTVETDKGQIECQYFVNCAGQWAYELGLSNEEPVSIPLHACEHFYLLTRPLETPLQSS
TPTIVDADGRIYIRNWQGGILSGGFEKNPKPIFTEGKNQLEIQNLQEDWDHFEPLSSLLRRMPELETLE
IMKLVNCPETFTPDMRCIMGESPAVQGYFVLAMNSAGLSFGGGAGKYLAEWVMVHGYPSENWELDLKRF
GALQSSRTFLRHRVMEVMPMLMYDLKVPRWDFQTGRQLRTSPLYDRLDAQGARWMEKHGFERPKYFVPPDK
DLLALEQSKTFYKPDWFDIVESEVKCKEAVCVDMSSFTKFEITSTGDQALEVLQYLFSDNLDVPVGH
VHTGMLNEGGYENDCSIALRNKRSFFMISPTDQQVHCWAWLKKHMPKDSNLLLEDVTWKYTALNLIGPR
AVDVLSELSYAPMPDHFPSLFCKEMSVGYANGIRVMSMTHTGEPGFMLYPIEYALHVYNEVMSVGQKY
GIRNAGYYALRSLRIEKFFAFWGQDINNLTTPLECGRESRVKLEKGMDFIGRDALLQKQNGVYKRLTMF
ILDDHSDLDLWPWWGEPIYRNGQYVGKTTSSAYSYSLEHVCVCLGFVHNFSEDTGEEQVVTADFVNRGEY
EIDIAGYRFQAKAKLYPVASLFTQKRRKDDMELSDLHGK

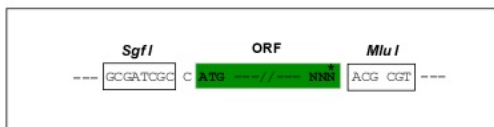
TRTRPLE - GFP Tag - V

Restriction Sites:

Sgfl-MluI

Cloning Scheme:

Cloning sites used for ORF Shuttling:



EcoRI *BamHI* *KpnI* *RBS* *Kozac Consensus* *SgfI* *AscI*
 CTATAGGCGCGCGGAATTCTGCTGACTGGATCCGGTACCGAGGAGATCTGCCCGCGCGATCGCCGGCGCGCCAGATCT

HindIII *NheI* *RsrII* *MluI* *NotI* *XhoI* GFP Tag
 CAAGCTTAAGTAGCTAGCGGACCG ACG CGT ACG CGG CCG CTC GAG ATG GAG AGC GAC --- --- ---
 T R T R P L E M E S D - - -

PmeI *FseI*
 --- --- GAA GAA AGA GTT TAA ACGCGCGGCCCGGAGCT
 - - E E R V Stop

ACCN: NM_017990

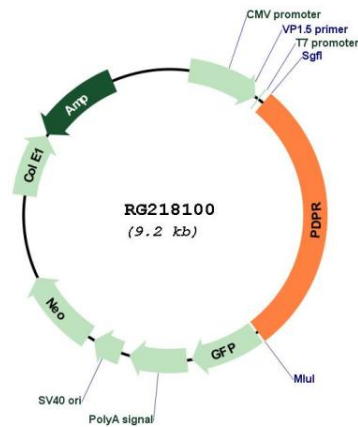
ORF Size: 2637 bp

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
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.
Note:	Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.
RefSeq:	NM_017990.5
RefSeq Size:	7999 bp
RefSeq ORF:	2640 bp
Locus ID:	55066
UniProt ID:	Q8NCN5
Cytogenetics:	16q22.1
Domains:	GCV_T
Protein Families:	Druggable Genome

Gene Summary:

Pyruvate dehydrogenase complex (PDC) catalyzes the oxidative decarboxylation of pyruvate and links glycolysis to the tricarboxylic acid cycle and fatty acid synthesis. The dephosphorylation and reactivation of PDC is catalyzed by pyruvate dehydrogenase phosphatase (PDP). The dimeric PDP has a catalytic subunit and a regulatory subunit. This gene encodes the FAD-containing regulatory subunit of PDP. The encoded protein acts to decrease the sensitivity of the PDP catalytic subunit to magnesium ions. Alternative splicing results in multiple transcript variants encoding different isoforms. [provided by RefSeq, Jan 2017]

Product images:



Circular map for RG218100