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Product datasheet for RC218100

PDPR (NM_017990) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	PDPR (NM_017990) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	PDPR
Synonyms:	PDP3
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)

View online »

ORF Nucleotide Sequence:

>RC218100 representing NM_017990
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGATGTTCTACCGGTTGCTGTCGATTGTTGGAAGACAAAGAGCCAGCCCAGGATGGCAGAACTGGTCCT
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CTGTGGAGGTGGAATCACGGGCACTTCTGTGGCCTATCACCTCTCCAAAATGGGGTGGAAGGATATTGTC
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TCAAGTGCTGTAAGGAAGCTGTGTGTGTCATTGACATGTCCTCTTTCACAAAGTTTGAGATAACATCCAC
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ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>RC218100 representing NM_017990
Red=Cloning site Green=Tags(s)

MMFYRLLSIVGRQRASPGWQNWSSARNSTSAAEARSMALPTQAQVVICGGGITGTSVAYHLSKMGWKDIV
LLEQGRLAAGSTRFCAGILSTARHLTIEQKMADYSNKLYYQLEQETGIQTGYTRTGSIFLAQTQDRLISL
KRINAGLNVIGIPSEIISPKKVAELHHLLNVHDLVGAMHVPEDAVVSSADVALALASAASQNGVQIYDRT
SVLHVMVKKGQVTGVETDKGQIECQYFVNCAGQWAYELGLSNEEPVSIPLHACEHFYLLTRPLETPLQSS
TPTIVDADGRIYIRNWQGGILSGGFEKNPKPIFTEGKNQLEIQNLQEDWDHFEPLLSSLLRRMPELETLE
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DLLALEQSKTFYKPDWFDIVESEVKCCKEAVCVIDMSSFTKFEITSTGDQALEVLQYLFSNDLDVPVGHI
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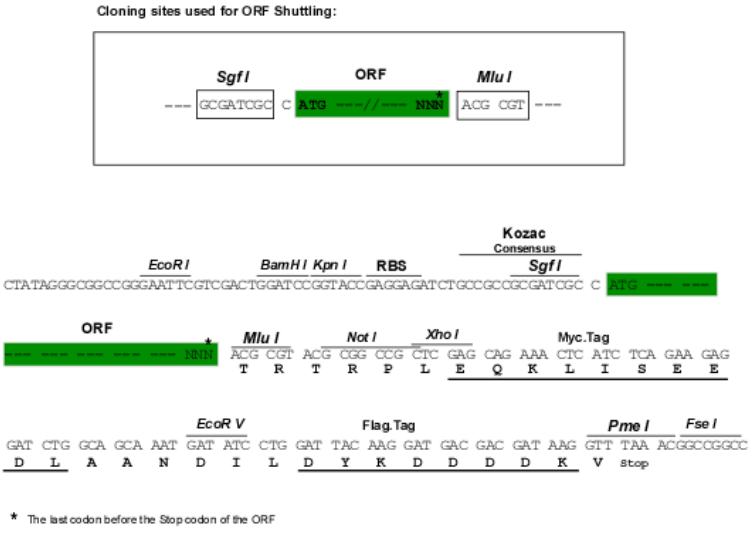
EIDIAGYRFQAKAKLYPVASLFTQKRRKDDMELSDLHGK

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk8103_a09.zip

Restriction Sites: SgfI-MluI

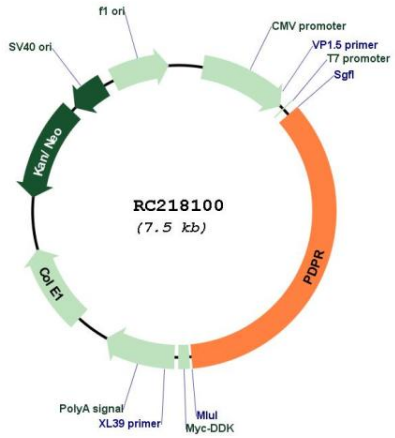
Cloning Scheme:



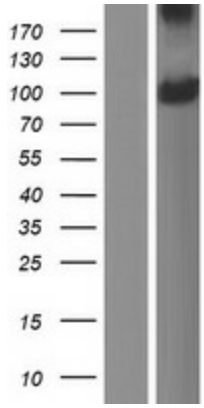
ACCN:	NM_017990
ORF Size:	2637 bp
OTI Disclaimer:	Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid 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.
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
MW:	99.4 kDa

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 RC218100



Western blot validation of overexpression lysate (Cat# [LY413397]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from un-transfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC218100 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).