

Product datasheet for **RC228456**

PDP1 (NM_001161779) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	PDP1 (NM_001161779) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	PDP1
Synonyms:	PDH; PDP; PDPC; PPM2A; PPM2C
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



[View online »](#)

ORF Nucleotide Sequence:

>RC228456 representing NM_001161779
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGCATCGCC**

ATGTGTGTGTGCCGGCCAGACGAATTGGAATCCAGTCAGAAGTCCAGCCTGCCACTGTTCTCTG
 ATGCCATGCCAGCACCACCACTCAACTGTTTTTCTCTCATCCGTAAGTGTGAAGTGAAGCAGGATCTATGG
 CACTGCATGTTACTGCCACCACAAACATCTCTGTTGTTCCCTCATCGTACATTCTCAGAGTCGACTGAGA
 TACACACCTCATCCAGCATATGCTACCTTTTGCAGGCCAAAGGAGAAGTGGTGGCAGTACACCCAAGGAA
 GGAGATATGCTTCCACACCACAGAAATTTACCTCACACCTCCACAAGTCAATAGCATCCTTAAAGCTAA
 TGAATACAGTTTCAAAGTGCCAGAATTTGACGGCAAAAATGTCAGTTCTATCCTTGGATTGACAGCAAT
 CAGCTGCCTGCAAATGCACCCATTGAGGACCGGAGAAGTGCAGCAACCTGCTGCAGACCAGAGGGATGC
 TTTTGGGGTTTTGATGGCCATGCAGGTTGTGCTTGTCCAGGCAGTCAGTGAAGACTCTTTTATTA
 TATTGCTGTCTTTGTTACCCCATGAGACTTTGCTAGAGATTGAAAATGCAGTGGAGAGCGGCCGGCA
 CTGCTACCCATTCTCCAGTGGCACAAGCACCCCAATGATTACTTTAGTAAGGAGGATCCAAATTGACT
 TTAACAGCTTGAGGACTTACTGGCAAGACTTATAGACCTCAACACTGGTGGTGGTGGTGGTGGTGGT
 TAAGGAGGCTCTAATTAATGCCTTCAAGAGGCTTGATAATGACATCTCCTTGGAGGCGCAAGTTGGTGGT
 CCTAATCTTTTCTCAACTACCTGGTGGTTCGAGTGGCATTCTTGGAGCCACTGCTTGTGTGGCCCATG
 TGGATGGTGTGACCTTCATGTGGCCAATACTGGCGATAGCAGAGCCATGCTGGGTGTGCAGGAAGAGGA
 CGGCTCATGGTCAGCAGTCACGCTGTCTAATGACCACAATGCTCAAAATGAAAGAGAAGTGAACCGCTG
 AAATTGGAACATCAAAGAGTGAAGGCAAGAGTGTGCGTAAACAGGATCGGCTGCTTGGCTTGTGATGC
 CATTTAGGGCATTGGAGATGTAAGTTCAAATGGAGCATTGACCTTCAAAGAGAGTGAAGAATCTGG
 CCCAGACCAGTTGAATGACAATGAATATACCAAGTTTATTCTCTCAATTATCACACACCTCTTATCTC
 ACTGCTGAGCCAGAGGTAACCTACCACCGATTAAGGCCACAGGATAAGTTTCTGGTGTGGCTACTGATG
 GTTTGTGGGAGACTATGCATAGGCAGGATGTGGTTAGGATTGTGGGTGAGTACCTAACTGGCATGCATCA
 CCAACAGCCAATAGCTGTTGGTGGCTACAAGGTGACTCTGGGACAGATGCATGGCCTTTTAAACAGAAAGG
 AGAACCAAAATGCTCCTCGGTATTTGAGGATCAGAACGCAGCAACCCATCTCATTCCGCCACGCTGTGGCA
 ACAACGAGTTTGGGACTGTTGATCATGAGCGCCTCTCTAAATGCTTAGTCTTCTGAAGAGCTTGTCTCG
 AATGTACAGAGATGACATTACAATCATTGTAGTTCAGTTCATTCTCATGTTGTAGGGCGTATCAAAC
 CAAGAA

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>RC228456 representing NM_001161779
 Red=Cloning site Green=Tags(s)

MCVCPGPRRIGIPVRSSSLPLFSDAMPAPTQLFFPLIRNCEL SRIYGTACYCHHKHLCCSSSYIPQSRLR
 YTPHPAYATFCRPKENWWQYTGRRYASTPQKFYLTPPVNSILKANEYSFKVPEFDGKNVSSILGFDSN
 QLPANAPIEDRRSAATCLQTRGMLLGVFDGHAGCACSQAVSERLFYYIAVSLLPHETLLEIENAVESGRA
 LLPILQWHKHPNDYFSKEASKLYFNLSLRTYWQELIDLNTGESTDIDVKEALINAFKRLDNDISLEAQVGD
 PNSFLNLYLVRVAFSGATACVAHVDGVDLHVANTGDSRAMLGVQEEDGSWSAVTL SNDHNAQNERELERL
 KLEHPKSEAKSVVKQDRLLGLLMPFRAFQDVKFKWSIDLQKRVIESGPDQLNDNEYTKFIPPNYHTPPYL
 TAEPEVTHRLRPQDKFLVLA TDGLWETMHRQDVVRIVGEYLTGMHHQPIAVGGYKVTLGQMHGLLTER
 RTKMSSVFEDQNAATHLIRHAVGNNEFGTV DHERLSKMLSLPEELARMYRDDITIIIVVQFN SHVVGAYQN
 QE

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms:

https://cdn.origene.com/chromatograms/mk8067_d09.zip

Restriction Sites:

Sgfl-Mlul

Cloning Scheme:



ACCN: NM_001161779

ORF Size: 1686 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_001161779.1](#), [NP_001155251.1](#)

RefSeq ORF: 1689 bp

Locus ID: 54704

UniProt ID: [Q9P0J1](#)

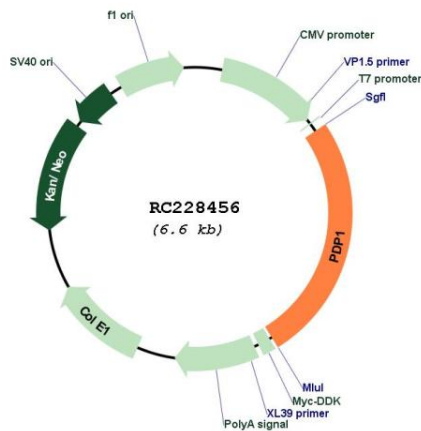
Cytogenetics: 8q22.1

Protein Families: Druggable Genome, Phosphatase

MW: 63.5 kDa

Gene Summary: Pyruvate dehydrogenase (E1) is one of the three components (E1, E2, and E3) of the large pyruvate dehydrogenase complex. Pyruvate dehydrogenase kinases catalyze phosphorylation of serine residues of E1 to inactivate the E1 component and inhibit the complex. Pyruvate dehydrogenase phosphatases catalyze the dephosphorylation and activation of the E1 component to reverse the effects of pyruvate dehydrogenase kinases. Pyruvate dehydrogenase phosphatase is a heterodimer consisting of catalytic and regulatory subunits. Two catalytic subunits have been reported; one is predominantly expressed in skeletal muscle and another one is is much more abundant in the liver. The catalytic subunit, encoded by this gene, is the former, and belongs to the protein phosphatase 2C (PP2C) superfamily. Along with the pyruvate dehydrogenase complex and pyruvate dehydrogenase kinases, this enzyme is located in the mitochondrial matrix. Mutation in this gene causes pyruvate dehydrogenase phosphatase deficiency. Multiple alternatively spliced transcript variants encoding different isoforms have been identified.[provided by RefSeq, Jun 2009]

Product images:



Circular map for RC228456