

## Product datasheet for **RC228480**

### **PDP1 (NM\_001161778) Human Tagged ORF Clone**

#### **Product data:**

Product Type:	Expression Plasmids
Product Name:	PDP1 (NM_001161778) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	PDP1
Synonyms:	PDH; PDP; PDPC; PPM2C
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



[View online »](#)

**ORF Nucleotide Sequence:**

>RC228480 representing NM\_001161778  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGCATCGCC**

ATGAGCATCTCTGCCTTGTCTTCAATGGGCGCGTCTGCTGCTCGCTGCTGCTGCCCGCGCGGGTTGTGGA  
 TGTTGTCGGCTCCGTGTTGTGATGACAGGAGAATGTGTGTGTGCCGGGCCAGACGAATTGGAATCCC  
 AGTCAGAAGTCCAGCCTGCCACTGTTCTCTGATGCCATGCCAGCACCACCACTCAACTGTTTTTCCTCTC  
 ATCCGTAAGTGAAGTGAAGTGAAGTGAAGTGAAGTGAAGTGAAGTGAAGTGAAGTGAAGTGAAGTGAAGT  
 CCTCATCGTACATTCTCAGAGTCGACTGAGATACACACCTCATCCAGCATATGCTACCTTTTGCAGGCC  
 AAAGGAGAAGTGGTGGCAGTACACCAAGGAAGGAGATATGCTCCACACCACAGAAATTTACCTCACA  
 CCTCCACAAGTCAATAGCATCCTTAAAGCTAATGAATACAGTTTCAAAGTCCAGAAATTTGACGGCAAAA  
 ATGTCAGTTCTATCCTTGGATTTGACAGCAATCAGCTGCCTGCAATGCACCCATTGAGGACCGGAGAAG  
 TGCAGCAACCTGCTTGCAGACCAGAGGGATGCTTTTGGGGTTTTTGGATGGCCATGCAGGTTGTGCTTGT  
 TCCAGGCAGTCAGTGAAGACTCTTTTATTATATTGCTGTCTCTTTGTTACCCCATGAGACTTTGCTAG  
 AGATTGAAAATGCAGTGGAGAGCGCGCGGCACTGCTACCCATTCTCCAGTGGCACAAGCACCCCAATGA  
 TTACTTTAGTAAGGAGGCATCCAAATGTAATTTAACAGCTTGGAGACTTACTGGCAAGAGCTTATAGAC  
 CTCAACTGTTGAGTGCAGTATATTGATGTTAAGGAGGCTCTAATTAATGCCTTCAAGAGGCTTGATA  
 ATGACATCTCCTTGGAGGCGCAAGTGGTATCCAAATCTTTTCAACTACCTGGTGTCTCGAGTGGC  
 ATTTTCTGGAGCCACTGCTTGTGTGGCCATGTGGATGGTGTGACCTTCATGTGGCCAATACTGGCGAT  
 AGCAGGCCATGCTGGTGTGCAGGAAGAGGACGGCTCATGGTCAGCAGTCACGCTGTCTAATGACCACA  
 ATGCTCAAAATGAAAGAGAAGTGAAGAGGCTGAAATTTGAAACATCAAAGAGTGAAGGCAAGAGTGCCT  
 GAAACAGGATCGGCTGCTTGGCTTGTCTGATGCCATTTAGGGCATTGGAGATGTAAGTCAAAATGGAGC  
 ATTGACCTTCAAAGAGAGTGAATAGAATCTGGCCAGACCAGTTGAATGACAATGAATATACCAAGTTTA  
 TTCCTCTAATATCACACACCTCCTTATCTCACTGCTGAGCCAGAGGTAACCTACCACCGATTAAGGCC  
 ACAGGATAAGTTTCTGGTGTGGCTACTGATGGTGTGGGAGACTATGCATAGGCAGGATGTGGTTAGG  
 ATTGTGGGTGAGTACCTAACTGGCATGCATCACCACAGCCAATAGCTGTTGGTGGCTACAAGGTGACTC  
 TGGGACAGATGCATGGCCTTTTAAACAGAAAGGAGAACCAAAATGCTCCTCGGTATTGAGGATCAGAACGC  
 AGCAACCCATCTCATTGCCAGCTGTGGCAACAACAGTGTGGGACTGTTGATCATGAGCGCCTCTCT  
 AAAATGCTTAGTCTTCTGAAGAGCTTGTCTGAATGTACAGAGATGACATTACAATCATTGTAGTTCAGT  
 TCAATTCTCATGTTGTAGGGCGTATCAAACCAAGAA

**ACGCGT**ACGCGGCGGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
 ACAAGGATGACGACGATAAGGTTTAA

**Protein Sequence:**

>RC228480 representing NM\_001161778  
 Red=Cloning site Green=Tags(s)

MSISALLSMGRCCCRCCPRGLWMLSAPCCDDRRMCVCPGPRRIGIPVRSSSLPLFSDAMPAPTQLFFPL  
 IRNCELSRIYGTACYCHHKHLCCSSYIPQRSRLRYTPHPAYATFCRPKENWWQYTQGRRYASTPKFYLT  
 PPQVNSILKANEYSFKVPEFDGKNVSSILGFDSNQLPANAPIEDRRSAATCLQTRGMLLGVFDGHAGCAC  
 SQAVSERLFYYIAVSLLPHELTLEIENAVESGRALLPILQWHKHPNDYFKEASKLYFNLSLRTYQWELID  
 LNTGESTDIDVKEALINAFKRLNDIISLEAQVGPNSFLNYLVLRVAFSGATACVAHVDGVDLHVANTGD  
 SRAMLGVQEEDGSWSAVTLSDNHNAQNERELERLKEHPKSEAKSVVKQDRLLGLLMPFRAFGDVDFKWS  
 IDLQKRVIESGPDQLNDNEYTKFIPPNYHTPPYLTAEPVYHRLRPQDKFLVLAATDGLWETMHRQDVVR  
 IYGEYL TGMHHQPIAVGGYKVTLGQMHGLLTERRTKMSSVFEDQNAATHLIRHAVGNNEFGTVDHERLS  
 KMLSLPEELARMYRDDITIIIVVQFNSHVVGAYQNQE

**TR**TRPLEQKLISEEDLAANDILDYKDDDDKV

**Chromatograms:**

[https://cdn.origene.com/chromatograms/mk8068\\_h12.zip](https://cdn.origene.com/chromatograms/mk8068_h12.zip)

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM\_001161778

ORF Size: 1788 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\\_001161778.1](#), [NP\\_001155250.1](#)

RefSeq ORF: 1790 bp

Locus ID: 54704

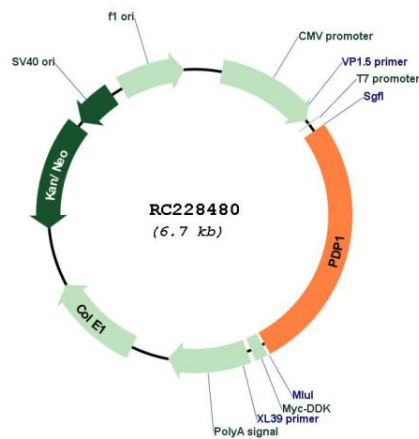
Cytogenetics: 8q22.1

**Protein Families:** Druggable Genome, Phosphatase

**MW:** 67.3 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 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 RC228480