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Product datasheet for SC327582

PDP1 (NM_001161781) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	PDP1 (NM_001161781) Human Untagged Clone
Tag:	Tag Free
Symbol:	PDP1
Synonyms:	PDH; PDP; PDPC; PPM2A; PPM2C
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)

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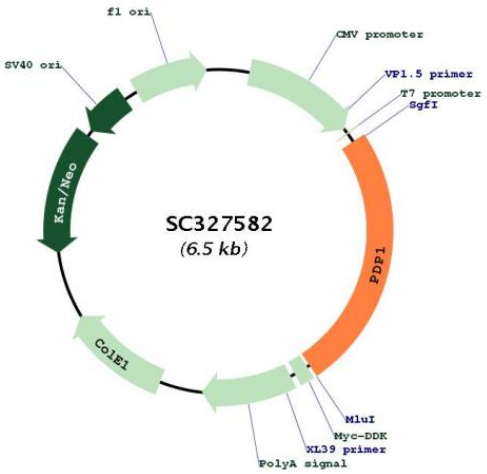
Fully Sequenced ORF:

>SC327582 representing NM_001161781.
Blue=Insert sequence Red=Cloning site Green=Tag(s)

GCTCGTTTAGTGAACCGTCAGAATTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTG
GATCCGGTACCGAGGAGATCTGCCGCCGCGATCGCC
ATGCCAGCACCAACTCAACTGTTTTTTCCTCTCATCCGTAACTGTGAACTGAGCAGGATCTATGGCACT
GCATGTTACTGCCACCACAAACATCTCTGTTGTTCCTCATCGTACATTCCTCAGAGTCGACTGAGATAC
ACACCTCATCCAGCATATGCTACCTTTTGCAGGCCAAAGGAGAACTGGTGGCAGTACACCCAAGGAAGG
AGATATGCTTCCACACCACAGAAATTTTACCTCACACCTCCACAAGTCAATAGCATCCTTAAAGCTAAT
GAATACAGTTTCAAAGTGCCAGAATTTGACGGCAAAAATGTCAGTTCTATCCTTGGATTTGACAGCAAT
CAGCTGCCTGCAAATGCACCCATTGAGGACCGGAGAAGTGCAGCAACCTGCTTGCAGACCAGAGGGATG
CTTTTGGGGGTTTTTGATGGCCATGCAGGTTGTGCTTGTTCCCAGGCAGTCAGTGAAAGACTCTTTTAT
TATATTGCTGTCTCTTTGTTACCCCATGAGACTTTGCTAGAGATTGAAAATGCAGTGGAGAGCGGCCGG
GCACTGCTACCCATTCTCCAGTGGCACAAGCACCCCAATGATTACTTTAGTAAGGAGGCATCCAAATTG
TACTTTAACAGCTTGAGGACTTACTGGCAAGAGCTTATAGACCTCAACACTGGTGAGTCGACTGATATT
GATGTTAAGGAGGCTCTAATTAATGCCTTCAAGAGGCTTGATAATGACATCTCCTTGGAGGCGCAAGTT
GGTGATCCTAATTCTTTTCTCAACTACCTGGTGCTTCGAGTGGCATTTTCTGGAGCCACTGCTTGTGTG
GCCCATGTGGATGGTGTTGACCTTCATGTGGCCAATACTGGCGATAGCAGAGCCATGCTGGGTGTGCAG
GAAGAGGACGGCTCATGGTCAGCAGTCACGCTGTCTAATGACCACAATGCTCAAAATGAAAGAGAACTA
GAACGGCTGAAATTGGAACATCCAAAGAGTGAGGCCAAGAGTGTCGTGAAACAGGATCGGCTGCTTGGC
TTGCTGATGCCATTTAGGGCATTTGGAGATGTAAAGTTCAAATGGAGCATTGACCTTCAAAAGAGAGTG
ATAGAATCTGGCCCAGACCAGTTGAATGACAATGAATATACCAAGTTTATTCCTCCTAATTATCACACA
CCTCCTTATCTCACTGCTGAGCCAGAGGTAACTTACCACCGATTAAGGCCACAGGATAAGTTTCTGGTG
TTGGCTACTGATGGGTTGTGGGAGACTATGCATAGGCAGGATGTGGTTAGGATTGTGGGTGAGTACCTA
ACTGGCATGCATCACCAACAGCCAATAGCTGTTGGTGGCTACAAGGTGACTCTGGGACAGATGCATGGC
CTTTTAACAGAAAGGAGAACCAAAATGTCCTCGGTATTTGAGGATCAGAACGCAGCAACCCATCTCATT
CGCCACGCTGTGGGCAACAACGAGTTTGGGACTGTTGATCATGAGCGCCTCTCTAAAATGCTTAGTCTT
CCTGAAGAGCTTGCTCGAATGTACAGAGATGACATTACAATCATTGTAGTTCAGTTCAATTCTCATGTT
GTAGGGGCGTATCAAAACCAAGAATAG
ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGAT
TACAAGGATGACGACGATAAGGTTTAAACGGCCGGC

Restriction Sites: SgfI-MluI

Plasmid Map:



ACCN:	NM_001161781
Insert Size:	1614 bp
OTI Disclaimer:	Our molecular clone sequence data has been matched to the reference identifier above as a point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative RNA splicing form or single nucleotide polymorphism (SNP).
OTI Annotation:	This TrueClone is provided through our Custom Cloning Process that includes sub-cloning into OriGene's pCMV6 vector and full sequencing to provide a non-variant match to the expected reference without frameshifts, and is delivered as lyophilized plasmid DNA.
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_001161781.1
RefSeq Size:	4234 bp
RefSeq ORF:	1614 bp
Locus ID:	54704
UniProt ID:	Q9P0J1
Cytogenetics:	8q22.1
Protein Families:	Druggable Genome, Phosphatase
MW:	61.1 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]
Transcript Variant: This variant (4) lacks an internal exon, compared to variant 2. The difference causes translation initiation at a downstream AUG and results in an isoform (3) with a shorter N-terminus, compared to isoform 2.