

Product datasheet for RC229995

PDHA1 (NM_001173455) Human Tagged ORF Clone

Product data:

Product Type: Expression Plasmids
Product Name: PDHA1 (NM_001173455) Human Tagged ORF Clone
Tag: Myc-DDK
Symbol: PDHA1
Synonyms: PDHA; PDHAD; PDHCE1A; PHE1A
Mammalian Cell Selection: Neomycin
Vector: pCMV6-Entry (PS100001)
E. coli Selection: Kanamycin (25 ug/mL)
ORF Nucleotide Sequence: >RC229995 representing NM_001173455
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGATCGCC**

ATGAGGAAGATGCTCGCCCGCTCTCCCGCTGCTGTCTGGCGTTCTCAGAAGCCGGCAAGCAGAGTGC
 TGGTAGCATCCCATAATTTGCAAATGATGCTACATTTGAAATTAAGAAATGTGACCTTCACCGGCTGGA
 AGAAGGCCCTCCTGTACAACAGTGTCTACCAGGGAGGATGGGCTCAAATACTACAGGATGATGCAGACT
 GTACGCCGAATGGAGTTGAAAGCAGATCAGCTGTATAAACAGAAAATTATTCGTGGTTTCTGTCACTTGT
 GTGATGGTCAGTTTCTCCTTCTAACAACAGGAAGCTTGTGTGGCCTGGAGGCCGGCATCAACCC
 CACAGACCATCTCATCACAGCCTACCGGCTCACGGCTTTACTTTACCCGGGGCCTTCCGTCCGAGAA
 ATTCTCGCAGAGCTTACAGGACGAAAAGGAGGTTGTGCTAAAGGGAAAGGAGGATCGATGCATGTATG
 CCAAGAATTCTACGGGGCAATGGCATCGTGGGAGCGCAGGTGCCCTGGGCGCTGGGATTGCTTAGC
 CTGTAAGTATAATGAAAAGATGAGGTCTGCCTGACTTTATATGGCGATGGTGTCTAACCAGGGCCAG
 ATATTCGAAGCTTACAACATGGCAGCTTGTGGAAATACCTTGTATTTTATCTGTGAGAATAATCGCT
 ATGGAATGGGAACGTCTGTTGAGAGAGCGGCAGCCAGCACTGATTACTACAAGAGAGGCGATTTCATTCC
 TGGGCTGAGAGTGGATGGAATGGATATCCTGTGCTCCGAGAGGCAACAAGTTTGTCTGCCTATTGT
 AGATCTGGGAAGGGCCATCCTGATGGAGCTGCAGACTTACCCTTACCAGGACACAGATGAGTGCAC
 CTGGAGTCAGTTACCGTACACGAGAAGAAATTCAGGAAGTAAGAAGTAAGAGTGACCCTATTATGCTTCT
 CAAGGACAGGATGGTGAACAGCAATCTTGCCAGTGTGGAAGAATAAGGAAATGATGTGGAAGTGAAG
 AAGGAGATTGAGGATGCTGCCAGTTTGCACGGCCGATCCTGAGCCACCTTTGGAAGAGCTGGGCTACC
 ACATCTACTCCAGCGACCCACCTTTTGAAGTTCGTGGTCCCAATCAGTGGATCAAGTTTAAAGTCAGTCAG
 T

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA



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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_001173455.2](#)

RefSeq ORF: 1194 bp

Locus ID: 5160

UniProt ID: [P08559](#)

Cytogenetics: Xp22.12

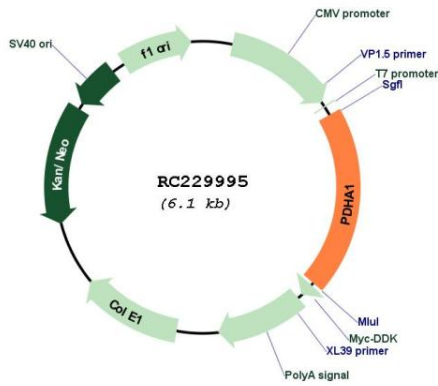
Protein Families: Druggable Genome

Protein Pathways: Butanoate metabolism, Citrate cycle (TCA cycle), Glycolysis / Gluconeogenesis, Metabolic pathways, Pyruvate metabolism, Valine, leucine and isoleucine biosynthesis

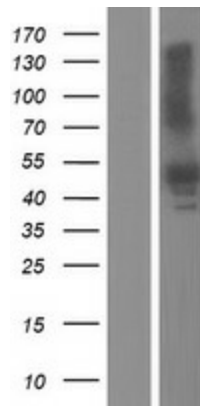
MW: 44.6 kDa

Gene Summary: The pyruvate dehydrogenase (PDH) complex is a nuclear-encoded mitochondrial multienzyme complex that catalyzes the overall conversion of pyruvate to acetyl-CoA and CO₂, and provides the primary link between glycolysis and the tricarboxylic acid (TCA) cycle. The PDH complex is composed of multiple copies of three enzymatic components: pyruvate dehydrogenase (E1), dihydrolipoamide acetyltransferase (E2) and lipoamide dehydrogenase (E3). The E1 enzyme is a heterotetramer of two alpha and two beta subunits. This gene encodes the E1 alpha 1 subunit containing the E1 active site, and plays a key role in the function of the PDH complex. Mutations in this gene are associated with pyruvate dehydrogenase E1-alpha deficiency and X-linked Leigh syndrome. Alternatively spliced transcript variants encoding different isoforms have been found for this gene.[provided by RefSeq, Mar 2010]

Product images:



Circular map for RC229995



Western blot validation of overexpression lysate (Cat# [LY432995]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC229995 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).