

Product datasheet for **SC328704**

PDHA1 (NM_001173454) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	PDHA1 (NM_001173454) Human Untagged Clone
Tag:	Tag Free
Symbol:	PDHA1
Synonyms:	PDHA; PDHAD; PDHCE1A; PHE1A
Mammalian Cell Selection:	None
Vector:	<u>pCMV6-XL5</u>
E. coli Selection:	Ampicillin (100 ug/mL)
Fully Sequenced ORF:	>NCBI ORF sequence for NM_001173454, the custom clone sequence may differ by one or more nucleotides

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ATGAGGAAGATGCTCGCCGCTCTCCCGCTGCTGTCTGGCGCTTCTCAGAAGCCGAGA
CATGGTCTTGCTACGTTGCCAGTCTGGTCTCCATCTCCAGGCTCAAGCAGTCTCCAC
CTCGGCCCTCCAAAGTGCTGGGATTACTCTCACTCTTAAAAACAGGCAGGCAAGCAGA
GTGCTGGTAGCATCCCGTAATTTTGCAAATGATGCTACATTTGAAATTAAGAAATGTGAC
CTTCACCGGCTGGAAGAAGGCCCTCTGTACAAACAGTGTCTACCAGGGAGGATGGGCTC
AAATACTACAGGATGATGCAGACTGTACGCCGAATGGAGTTGAAAGCAGATCAGCTGTAT
AAACAGAAAATTATTCGTGGTTTCTGTCACTTGTGTGATGGTCAGGAAGCTTGTGTGTG
GGCCTGGAGGCCGCATCAACCCACAGACCATCTCATCACAGCCTACCGGGCTCACGGC
TTTACTTTTACCCGGGGCTTTCCGTCCGAGAAATTCTCGCAGAGCTTACAGGACGAAAA
GGAGGTTGTGCTAAAGGGAAAGGAGGATCGATGCACATGTATGCCAAGAATTCTACGGG
GGCAATGGCATCGTGGGAGCGCAGGTGCCCTGGGCGCTGGGATTGCTCTAGCCTGTAAG
TATAATGGAAAAGATGAGGTCTGCCTGACTTTATATGGCGATGGTGTGTAACCAAGGGC
CAGATATTCGAAGCTTACAACATGGCAGCTTTGTGGAAATTACCTTGTATTTTCACTGT
GAGAATAATCGCTATGGAATGGGAACGTCTGTTGAGAGAGCGGCAGCCAGCACTGATTAC
TACAAGAGAGCGGATTTTCATTCTGGGCTGAGAGTGGATGGAATGGATATCCTGTGCGTC
CGAGAGGCAACAAGTTTGTCTGCTGCCTATTGTAGATCTGGGAAGGGGCCCATCTGATG
GAGCTGCAGACTTACCGTTACCACGGACACAGTATGAGTGACCTTGGAGTCAGTTACCGT
ACACGAGAAGAAATTCAGGAAGTAAGAAGTAAGAGTGACCTATTATGCTTCTCAAGGAC
AGGATGGTGAACAGCAATCTTGCCAGTGTGGAAGAAGTAAAGGAAATTGATGTGGAAGTG
AGGAAGGAGATTGAGGATGCTGCCAGTTTGCCACGGCCGATCCTGAGCCACCTTTGGAA
GAGCTGGGCTACCACATCTACTCCAGCGACCCACCTTTTGAAGTTCGTGGTGCCAATCAG
TGGATCAAGTTTAAAGTCAGTCAGTTAA

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Restriction Sites: Please inquire



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ACCN:	NM_001173454
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:	<ol style="list-style-type: none">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:	<u>NM_001173454.1</u> , <u>NP_001166925.1</u>
RefSeq Size:	3504 bp
RefSeq ORF:	1287 bp
Locus ID:	5160
UniProt ID:	<u>P08559</u>
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
Gene Summary:	<p>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]</p> <p>Transcript Variant: This variant (2) contains an additional in-frame coding exon compared to variant 1, resulting in a longer isoform (2) compared to isoform 1.</p>