

Product datasheet for RC229934L3

9620 Medical Center Drive, Ste 200 Rockville, MD 20850, US Phone: +1-888-267-4436

OriGene Technologies, Inc.

Phone: +1-888-267-4436 https://www.origene.com techsupport@origene.com EU: info-de@origene.com CN: techsupport@origene.cn

PDHA1 (NM_001173456) Human Tagged Lenti ORF Clone

Product data:

Product Type: Expression Plasmids

Product Name: PDHA1 (NM_001173456) Human Tagged Lenti ORF Clone

Tag: Myc-DDK
Symbol: PDHA1

Synonyms: PDHA; PDHAD; PDHCE1A; PHE1A

Mammalian Cell Puromycin

Selection:

Vector: pLenti-C-Myc-DDK-P2A-Puro (PS100092)

E. coli Selection: Chloramphenicol (34 ug/mL)

ORF Nucleotide The ORF insert of this clone is exactly the same as(RC229934).

Sequence:

Restriction Sites: Sgfl-Mlul

Cloning Scheme:





^{*} The last codon before the Stop codon of the ORF.

ACCN: NM_001173456

ORF Size: 1077 bp





PDHA1 (NM_001173456) Human Tagged Lenti ORF Clone - RC229934L3

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: <u>NM 001173456.1</u>

 RefSeq ORF:
 1080 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: 40.6 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 CO(2), 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]