

## Product datasheet for RC229903L4

## OriGene Technologies, Inc.

9620 Medical Center Drive, Ste 200 Rockville, MD 20850, US Phone: +1-888-267-4436 https://www.origene.com techsupport@origene.com EU: info-de@origene.com CN: techsupport@origene.cn

## Lactate Dehydrogenase B (LDHB) (NM\_001174097) Human Tagged Lenti ORF Clone

**Product data:** 

**Product Type:** Expression Plasmids

Product Name: Lactate Dehydrogenase B (LDHB) (NM\_001174097) Human Tagged Lenti ORF Clone

Tag: mGFP

Symbol: Lactate Dehydrogenase B

Synonyms: HEL-S-281; LDH-B; LDH-H; LDHBD; TRG-5

Mammalian Cell

Selection:

Puromycin

**Vector:** pLenti-C-mGFP-P2A-Puro (PS100093)

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

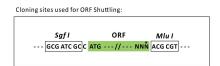
**ORF Nucleotide** 

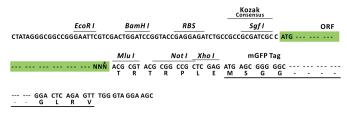
The ORF insert of this clone is exactly the same as(RC229903).

Sequence:

**Restriction Sites:** Sgfl-Mlul

**Cloning Scheme:** 





<sup>\*</sup> The last codon before the Stop codon of the ORF

**ACCN:** NM\_001174097

ORF Size: 1002 bp



ORÏGENE

**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 001174097.1</u>, <u>NP 001167568.1</u>

 RefSeq ORF:
 1005 bp

 Locus ID:
 3945

 UniProt ID:
 P07195

 Cytogenetics:
 12p12.1

**Protein Families:** Druggable Genome

**Protein Pathways:** Cysteine and methionine metabolism, Glycolysis / Gluconeogenesis, Metabolic pathways,

Propanoate metabolism, Pyruvate metabolism

**MW:** 37.1 kDa

**Gene Summary:** This gene encodes the B subunit of lactate dehydrogenase enzyme, which catalyzes the

interconversion of pyruvate and lactate with concomitant interconversion of NADH and NAD+ in a post-glycolysis process. Alternatively spliced transcript variants have been found for this gene. Recent studies have shown that a C-terminally extended isoform is produced by use of

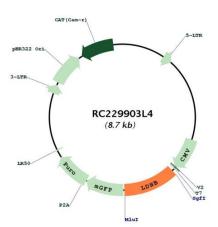
an alternative in-frame translation termination codon via a stop codon readthrough

mechanism, and that this isoform is localized in the peroxisomes. Mutations in this gene are associated with lactate dehydrogenase B deficiency. Pseudogenes have been identified on

chromosomes X, 5 and 13. [provided by RefSeq, Feb 2016]



## **Product images:**



Circular map for RC229903L4