

Product datasheet for RC200446L3

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OriGene Technologies, Inc.

OGDH (NM_002541) Human Tagged Lenti ORF Clone

Product data:

Product Type: Expression Plasmids

Product Name: OGDH (NM 002541) Human Tagged Lenti ORF Clone

Tag: Myc-DDK
Symbol: OGDH

Synonyms: AKGDH; E1k; KGD1; OGDC; OGDH2

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(RC200446).

Sequence:

Restriction Sites: Sgfl-Mlul

Cloning Scheme:





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

ACCN: NM_002541

ORF Size: 3069 bp



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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 002541.2</u>

RefSeq Size:4319 bpRefSeq ORF:3072 bpLocus ID:4967

UniProt ID: Q02218

Cytogenetics: 7p13

Domains: E1 dehydrog, transket pyr

Protein Families: Druggable Genome

Protein Pathways: Citrate cycle (TCA cycle), Lysine degradation, Metabolic pathways, Tryptophan metabolism

MW: 115.9 kDa

Gene Summary: This gene encodes one subunit of the 2-oxoglutarate dehydrogenase complex. This complex

catalyzes the overall conversion of 2-oxoglutarate (alpha-ketoglutarate) to succinyl-CoA and CO(2) during the Krebs cycle. The protein is located in the mitochondrial matrix and uses

thiamine pyrophosphate as a cofactor. A congenital deficiency in 2-oxoglutarate dehydrogenase activity is believed to lead to hypotonia, metabolic acidosis, and

hyperlactatemia. Alternative splicing results in multiple transcript variants encoding distinct

isoforms.[provided by RefSeq, Sep 2009]