

Product datasheet for RC200446L2

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:	mGFP
Symbol:	OGDH
Synonyms:	AKGDH; E1k; KGD1; OGDC; OGDH2
Mammalian Cell Selection:	None
Vector:	pLenti-C-mGFP (PS100071)
E. coli Selection:	Chloramphenicol (34 ug/mL)
ORF Nucleotide Sequence:	The ORF insert of this clone is exactly the same as(RC200446).
Restriction Sites:	SgfI-MluI
Cloning Scheme:	

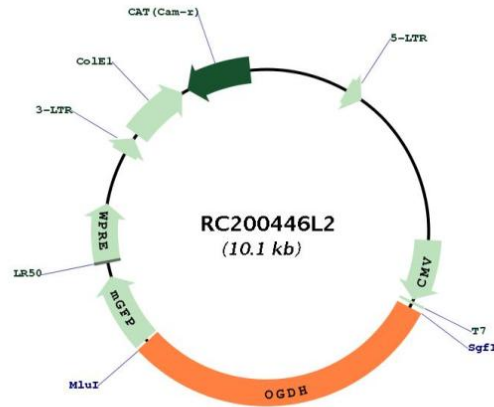
Cloning sites used for ORF Shuttling:



* The last codon before the Stop codon of the ORF.



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Plasmid Map:


ACCN: NM_002541

ORF Size: 3069 bp

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: [NM_002541.2](#)

RefSeq Size: 4319 bp

RefSeq ORF: 3072 bp

Locus 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]