

Product datasheet for **RC217631**

L2HGDH (NM_024884) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	L2HGDH (NM_024884) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	L2HGDH
Synonyms:	C14orf160; L2HGA
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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ORF Nucleotide Sequence:

>RC217631 representing NM_024884
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGCATCGCC**

ATGGTGCCAGCGCTGCGTTATTTGGTTGGTGCCTGCGGACGGCCCGCGGCGTTTCGCGCGTGGCTCCC
 CTGGGGCGTGCGGGTTCGCGTCTGGGAGGCCAAGACCGCTGTGTGGAGGTAGCCGACGCGCCAGCACCAG
 CTCATTTGATATAGTCATTGTTGGTGGCGGAATTTGTTGGGCTTGCCCTGCCAGAGCACTCATCCTGCGA
 CATCCATCACTTTCTATTGGTGTCTGGAAAAGGAGAAAGATTTAGCTGTTACCAGACTGGACATAACA
 GTGGTGCATACATAGTGAATTTATTATAAACCTGAGTCTCTGAAAGCCAAATTATGTGTACAAGTGC
 AGCCCTCCTCTATGAGTACTGTCAGCAAAGGGAATTTCTACAAGCAGTGTGGCAAGCTTATAGTAGCT
 GTTGAACAAGAAGAAATCCCAGACTTCAGGCCCTATATGAGAAAGGCCCCAGAATGGTGTCCCGGGCC
 TGAGGCTGATCCAGCAGGAGGATATAAAAAAGAAGGAGCCATATTGTAGGGGTCTAATGGCTATTGATTG
 TCCACATACTGGCATTGTGGACTATCGGCAGTGGCTTTGTCATTTGCCAGGATTTCCAAGAAGCAGGT
 GGCCTGTGCTTGACCAATTTTGAAGTAAAAGGTATTGAAATGGCTAAAGAAAGTCCTTCAAGAAGTATAG
 ATGGAATGCAATATCCAATTGTTATAAAGAATACAAAGGAGAGGAAATTCGATGTCAGTATGTTGTGAC
 ATGTGCAGGACTTTACTCAGACCGTATTTAGAGTTGAGTGGCTGCACTCCTGATCCTCGAATTGTACCA
 TTCCGGGGAGATTACCTGCTTTTGAAGCCAGAAAAATGTTATCTTGTAAAAGGAAATATTTATCCGGTCC
 CAGATAGCCGGTTTCTTCTAGGAGTTCACCCACCAAGGATGGATGGCAGTATTTGGCTAGGGCC
 TAATGCAGTCTTGCCTTAAACGAGAGGGTTACAGACCTTTGACTTCAGTGCCACAGATGTTATGGAT
 ATAATTATCAATAGTGGCTTGAATAAAGTGCATCCCAGAATTTTCTATGGAGTACTGAAATGTATA
 AAGCATGTTTTCTTGGTCAACAGTGAAGTATCTTCAAAAATTCATCCCTGAAATTAAGTACTGATGATA
 ACTTAGGGGCCAGCTGGAGTAAGAGCCAGGCCCTGGATAGAGATGGAATCTGGTAGAAGATTTTGT
 TTTGATGCAGGAGTTGGGGATATTGAAATCGCATTCTTCATGTGAGAAATGCACCTTCTCTGCTGCTA
 CTCTTCCATTGCAATTTCTGGAATGATTGCAGATGAAGTACAACAAAGATTTGAATTA

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>RC217631 representing NM_024884
 Red=Cloning site Green=Tags(s)

MVPALRYLVGACGRARGRFAGGSPGACGFASGRPRPLCGGSRASSTSSFDIVIVGGGIVGLASARALILR
 HPSLSIGVLEKEKDLAVHQTHNSGVIHSGIYYKPESLKAKLCVQGAALLYEYCQKGISYKQCGKLIVA
 VEQEEIPRLQALYEKGLQNGVPLRLIQQEDIKKKEPYCRGLMAIDCPHTGIVDYRQVALSFAQDFQEAG
 GSVLTNFEVKGIEMAKESPSRSIDGMQYPIVIKNTKGEEIRCQYVVTAGLYSDRISEL SGCTPDPRIVP
 FRGDYLLKPEKCYLVKGNIIYVPDSRFPFLGVHFTPRMDGSIWLGPNVLAFAKREGYRPFDF SATDVMD
 IINSGLIKLASQNFYGVTEMYKACFLGATVKYLQKFIPEITISDILRGPAGVRAQALDRDGNLVEDFV
 FDAGVGDIGNRILHVRNAPSPAATSSIAISGMIADDEVQQR FEL

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms:

https://cdn.origene.com/chromatograms/mg3891_b02.zip

Restriction Sites:

Sgfl-Mlul

Cloning Scheme:


ACCN: NM_024884

ORF Size: 1389 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.

Note: Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.

RefSeq: [NM_024884.3](#)

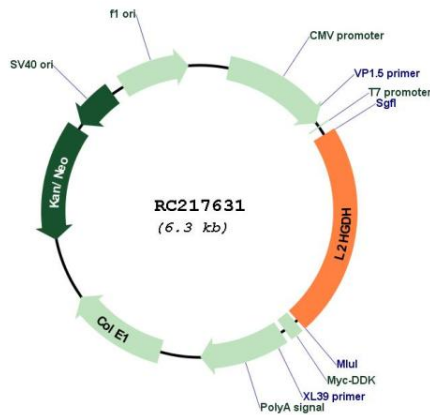
RefSeq Size: 2064 bp

RefSeq ORF: 1392 bp

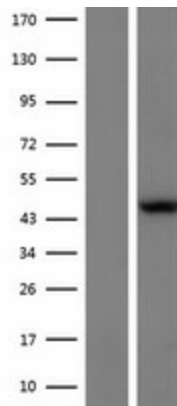
Locus ID: 79944

UniProt ID: [Q9H9P8](#)
Cytogenetics: 14q21.3
Protein Pathways: Butanoate metabolism
MW: 45.2 kDa
Gene Summary: This gene encodes L-2-hydroxyglutarate dehydrogenase, a FAD-dependent enzyme that oxidizes L-2-hydroxyglutarate to alpha-ketoglutarate in a variety of mammalian tissues. Mutations in this gene cause L-2-hydroxyglutaric aciduria, a rare autosomal recessive neurometabolic disorder resulting in moderate to severe cognitive disability. [provided by RefSeq, Jul 2008]

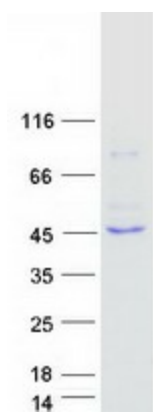
Product images:



Circular map for RC217631



Western blot validation of overexpression lysate (Cat# [LY410989]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC217631 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified L2HGDH protein (Cat# [TP317631]). The protein was produced from HEK293T cells transfected with L2HGDH cDNA clone (Cat# RC217631) using MegaTran 2.0 (Cat# [TT210002]).