

Product datasheet for RC237900

D2HGDH (NM_001287249) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	D2HGDH (NM_001287249) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	D2HGDH
Synonyms:	D2HGD
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC237900 representing NM_001287249 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCCCGCATCGCC

ATGGTGGGTGGCAGCGTCCCGTCTTTGACGAGATCATCCTCTCCACTGCCCGCATGAACCGGTCTCTCA
 GCTTCCACAGCGTGTCTGGAATTCGTTTCCAGGCGGGCTGCGTCCTGGAGGAGCTGAGCCGGTATGT
 GGAGGAACGGGACTTCATCATGCCGCTGGACTTAGGAGCCAAGGGCAGCTGCCACATCGGGGAAACGTG
 GCAACCAACGCTGGAGGCTGCGGTTTCTCGATATGGCTCACTGCATGGGACTGTCCTGGGCTGGAAG
 TGGTGCTGGCCGACGGCACTGTCTGGACTGCCTGACCTCCCTGAGGAAGGACAACACGGGCTATGACCT
 GAAGCAGCTGTTCATCGGGTCGGAGGGCACTTTGGGGATCATCACACGGTGTCCATCTTGTGTCCACCC
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 CCTGCAAGGGGATGCTGGGTGAGATCCTGTCTGCATTGAGTTTATGGATGCTGTGTGCATGCAGCTGGT
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 TCCAACGCAGGCCATGACGCTGAGAAGCTGGGCCACTTCTGGAGCACGCGCTGGGCTCCGGCCTGGTGA
 CCGATGGGACCATGGCCACCGACCAGAGGAAAGTCAAGATGCTGTGGGCCCTGAGGAAAGGATCACAGA
 GCGCTGAGCCGGGATGGCTACGTGTACAAGTACGACCTCTCCCTCCCTGTGGAGCGGCTCTACGACATC
 GTGACTGACCTGCGCGCCCGCTCGGCCCGCACGCCAAGCAGTGGTGGGCTATGGCCACCTTGAGATG
 GTAACCTGCACCTCAATGTGACGGCGGAGGCCTTCAGCCCTCGCTCCTGGCTGCCCTGGAGCCCCACGT
 GTACGAGTGGACGGCCGGCAGCAGGGCAGCGTCAGCGGAGCAGGAGTGGGCTTCAGGAAGAGGGAC
 GTCCTGGGCTACAGCAAGCCACCGGGGGCCCTGCAGCTCATGCAGCAGCTCAAGGCCCTGCTGGACCCCA
 AGGGCATCCTCAACCCCTACAAGACGCTGCCAGCCAGGCC

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA


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Protein Sequence: >RC237900 representing NM_001287249
 Red=Cloning site Green=Tags(s)

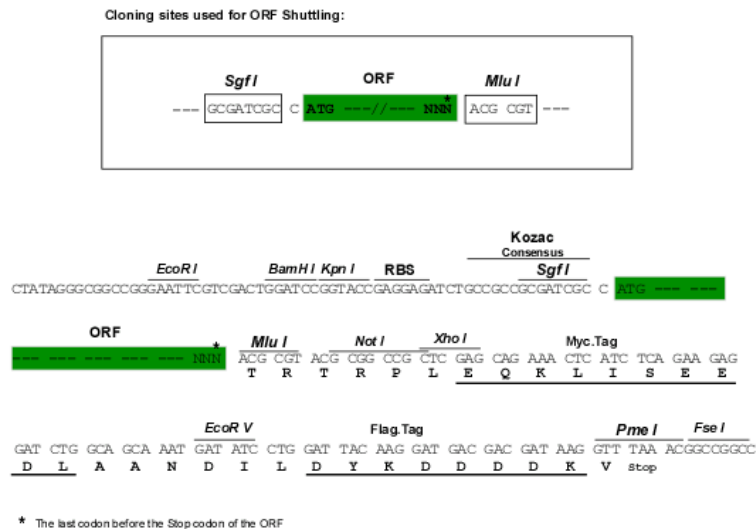
MVGGSPVPVFDEIILSTARMNRLSFHVSIGILVCQAGCVLEELSRVVEERDFIMPLDLGAKGSGHIGNV
 ATNAGGLRFLRYGSLHGTVLGLEVVADGTVDCLTSLRKDNTGYDLKQLFIGSEGLGIITTVSILCPP
 KPRAVNVAFLGCPGFAEVLQTFSTCKGMLGEILSAFEFMDAVCMQLVGRHLHLASPVQESPFYVL IETSG
 SNAGHDAEKLGHFLEHALGSGLVTDGTMATDQRKVKMLWALRERITEALSRDGYVYKYDLSLPVERLYDI
 VTDLRARLGPHAKHVVGYGHLGDGNLHLNVTAEAFSPSLAALAEHPHYEWTAGQQGSVSAEHGVGFRKRD
 VLGYSKPPGALQLMQQLKALLDPKGILNPYKTLPSQA

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/ja3106_c11.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_001287249

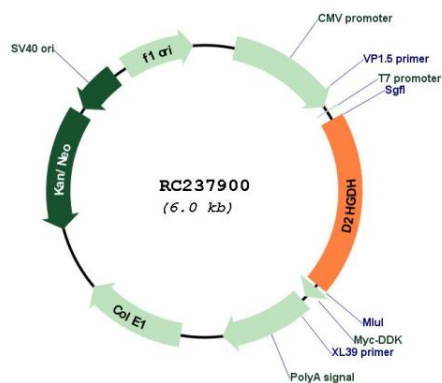
ORF Size: 1161 bp

OTI Disclaimer: Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at custsupport@origene.com or by calling 301.340.3188 option 3 for pricing and delivery.

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_001287249.2
RefSeq Size:	2276 bp
RefSeq ORF:	1164 bp
Locus ID:	728294
UniProt ID:	Q8N465
Cytogenetics:	2q37.3
MW:	41.8 kDa
Gene Summary:	This gene encodes D-2hydroxyglutarate dehydrogenase, a mitochondrial enzyme belonging to the FAD-binding oxidoreductase/transferase type 4 family. This enzyme, which is most active in liver and kidney but also active in heart and brain, converts D-2-hydroxyglutarate to 2-ketoglutarate. Mutations in this gene are present in D-2-hydroxyglutaric aciduria, a rare recessive neurometabolic disorder causing developmental delay, epilepsy, hypotonia, and dysmorphic features. [provided by RefSeq, Jul 2008]

Product images:



Circular map for RC237900