

Product datasheet for **SC335794**

D2HGDH (NM_001287249) Human Untagged Clone

Product data:

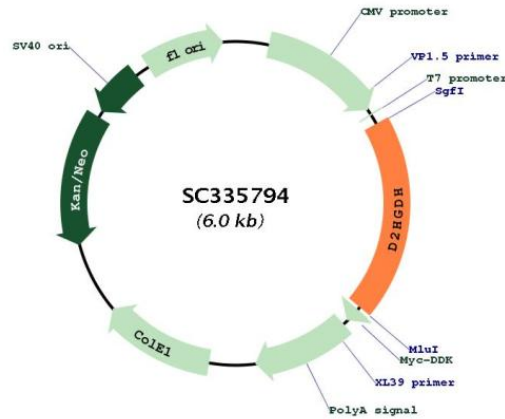
Product Type:	Expression Plasmids
Product Name:	D2HGDH (NM_001287249) Human Untagged Clone
Tag:	Tag Free
Symbol:	D2HGDH
Synonyms:	D2HGD
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Fully Sequenced ORF:	>SC335794 representing NM_001287249. Blue=Insert sequence Red=Cloning site Green=Tag(s)

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GCTCGTTT TAGTGAACCGTCAGAATTTTGT AATACGACTCACTATAGGGCGCCGGGAATTCGTCGACTG
GATCCGGTACCGAGGAGATCTGCCGCC CGCATCGCC
ATGGTGGGTGGCAGCGTCCCGTCTTTGACGAGATCATCCTCTCCACTGCCCGCATGAACCGGGTCTCTC
AGCTTCCACAGCGTGTCTGGAATTTCTGGTTTGCCAGGCGGGTGCCTGGAGGAGCTGAGCCGGTAT
GTGGAGGAACGGGACTTCATCATGCCGTGGACTTAGGAGCCAAGGGCAGCTGCCACATCGGGGAAAC
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TTCAGCACCTGCAAGGGGATGCTGGGTGAGATCCTGTCTGCATTTCGAGTTTCAATGGATGCTGTGTGCATG
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AGGATCACAGAGGCGCTGAGCCGGGATGGCTACGTGTACAAGTACGACCTCTCCCTCCCTGTGGAGCGG
CTCTACGACATCGTGACTGACCTGCGCGCCCGCTCGGCCGACGCCAAGCACGTTGGTGGGCTATGGC
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TTCAGGAAGAGGGACGTCCTGGGCTACAGCAAGCCACCGGGGGCCCTGCAGCTCATGCAGCAGCTCAAG
GCCCTGTGGACCCCAAGGGCATCCTCAACCCCTACAAGACGCTGCCAGCCAGGCC TGA
ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGAT
TACAAGGATGACGACGATAAGGTTTAAACGGCCGGC
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Restriction Sites: SgfI-MluI



[View online >](#)

Plasmid Map:


ACCN: NM_001287249

Insert Size: 1164 bp

OTI Disclaimer: Our molecular clone sequence data has been matched to the reference identifier above as a point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative RNA splicing form or single nucleotide polymorphism (SNP).

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_001287249.1](#)

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]

Transcript Variant: This variant (2) differs in the 5' UTR, lacks a portion of the 5' coding region, and initiates translation at a downstream start codon, compared to variant 1. The encoded isoform (2) is shorter than isoform 1.