

Product datasheet for MR211465

Ogdh (NM_010956) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Ogdh (NM_010956) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Ogdh
Synonyms:	2210403E04Rik; 2210412K19Rik; AA409584; d1401; mKIAA4192
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>MR211465 representing NM_010956 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGTTTCATTTAAGGACTTGTGCTGCTAAGTTAAGGCCATTGACAGCCTCCCAGACTGTTAAGACATTTT
CACAAAACAAACCAGCAGCAATTAGGACGTTTCAACAGATTCCGGTCTATTCTGCACCTGTAGTGCTGA
ACCATTTCTTAGTGGGACTAGTTCGAACATGTGGAGGAAATGTACTGTGCCTGGTTGGAGAATCCCAA
AGTGTACATAAGTCATGGGACATTTTTTCCGAAACACCAATGCTGGAGCCCCACCGGGCACTGCCTACC
AGAGCCCCCTTTCCCTGAGTCGAAGCTCCCTGGCTACCATGGCCATGCACAGTCCCTGGTGAAGCACA
ACCTAACGTCGACAAACTCGTGGAGGACCATTGGCGGTGCACTCTCATCAGGGCATATCAGATACGA
GGGCACCATGTAGCACAGCTGGACCCCCCTGGGATTTTGGATGCTGATCTGGACTCCTCCGTGCCCGCTG
ACATTATCTCATCCACAGACAAACTTGGGTTCTATGGCCTACACGAGTCTGACCTTGACAAGGTCTTCCA
CTTACCCACCACCACTTTTCATCGGGGACAGGAGCCAGCACTTCCCTTCGGGAGATCATCCGTCCGGCTG
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TCCGACAGAAGTTTGAGACCCCTGGAATCATGCAGTTCACCAATGAGGAGAAGCGGACCTTGCTGGCCAG
GCTTGTACGATCCACCAGTTTGGAGGTTCCCTACAGCGAAAGTGGTCCCTCGGAGAAGCGTTTTGGTCTG
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ATGTGATCATGGGGATGCCACACAGAGGACGGCTGAACGTGCTTGCAAATGTCATCAGGAAGGAGCTGGA
GCAAATATTCTGTGAGTTTACTCAAAGCTGGAGGCAGCTGATGAGGGTCTGGGGACATGAAGTACCAC
CTGGGCATGTATCACCAGGATCAACCGTGTGACCGACAGAAACATCACTTTGTCCTTGGTGGCTAACC
CTTCCCATCTAGAGGCTGCTGACCCTGTCGTGATGGGAAAGACCAAGCTGAACAGTTCTACTGTGGAGA
CACTGAAGGGAAAAAGGTGATGTCTATCCTGCTGCATGGGGATGCTGCTTTTGTGGCCAGGGCATCGTA
TATGAGACCTTCCATCTCAGCGACTTGCCGTCCTACACAACCCATGGCACTGTTTCATGTGGTTGTCAACA
ACCAGATTGGCTTCAACCACAGACCCTCGGATGGCCGCTCCTCTCCCTACCCCACTGATGTGCCCGGAGT
GGTGAATGCCCCATTTCCATGTCAACTCAGATGACCCTGAAGTGTGATGATGATGAAGGTGGCA



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GCTGAGTGGAGAAACACCTTCCACAAGGATGTTGTAGTTGATCTGGTGTGTTATCGACGAAATGGCCACA
 ATGAGATGGACGAACCTATGTTTACACAGCCACTCATGTACAAGCAGATCCGCAAGCAGAAGCCTGTACT
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 AAGTATGATAAAGATCTGTGAGGAAGCATTACCAGATCCAAGATGAGAAGATCTTGACATCAAGCACT
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ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>MR211465 representing NM_010956
 Red=Cloning site Green=Tags(s)

MFHLRTCAAKLRPLTASQTVKTFSSQNKPAAIRTFQQIRCYSAAPVAEPFLSGTSSNYVEEMYCAWLENPK
 SVHKSWDIFFRNTNAGAPPGTAYQSPLSLSRSSLATMAHAQSLVEAQPNVDKLVEDHLAVQSLIRAYQIR
 GHVVAQLDPLGILDADLDSSVPADIISSTDKLGfyGLHESDLKVFHLPTTTFIGGQEPALPLREIIRRL
 EMAYCQHIGVEFMFINDLEQCQWIRQKFETPGIMQFTNEEKRTLLARLVRSTRFEFLQRKWSSEKRFGL
 EGCEVLIPALKTIIDMSSANGVDYVIMGMPHRGRLNVLANVIRKELEQIFCQFDSKLEAADEGSGDMKYH
 LGMYHRRINRVTDNRNITLSLVANPSHLEAADPVVMGKTKAEQFYCGDTEGKVMISILLHGDAAFAGQGIV
 YETFHLSLPSYTHGTVHVVVNNQIGFTDPRMARSSPYPTDVARVVNAPIFHVNSDDPEAVMYVCKVA
 AEWRNTFHKDVVVDLVCYRRNGHNEMDEPMFTQPLMYKQIRKQKPVLPKYAELLVSQGVVNQPEYEEEIS
 KYDKICEEAFTRSKDEKILHIKHWLDSWPGFFTLDGQPRSMTCPTGLEEDVLFHIGKVASSVPVENFT
 IHGGLSRILKTRRELVTNRTVDWALAEYMAFGSLLKEGIHVRLSGQDVERGTFSHRHVHLHDQNVDKRTC
 IPMNLWPNQAPYTVCNSSLSEYGLVGFELGFAMASPNALVLEAQFGDFNNMAQCIIDQFICPGQAKWV
 RQNGIVLLLPHGMEGMGPEHSSARPERFLQMCNDDPDVLPDQEEFNFDINQLYDCNWIIVNCSTPGNFFH
 VLRRQILLPFRKPLIVFVTPKSLLRHPEARTSFDEMLPGTHFQRVIPENGPAAQDPHKVKRLLFCTGKVVY
 DLTRERKARNMEEVAITRIEQLSPFPDLLLLKEAQKYPNAELAWCQEEHKNQGYDYVVKPRLRTIDRA
 KPVVYAGRDPAAAPATGNKKTHLTELQRFLDLDAFDLDAFKKFS

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms:

https://cdn.origene.com/chromatograms/ja1888_a10.zip

Restriction Sites:

Sgfl-Mlul

Cloning Scheme:



ACCN: NM_010956

ORF Size: 3069 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.

RefSeq: [NM_010956.4](#), [NP_035086.2](#)

RefSeq Size: 6630 bp

RefSeq ORF: 3072 bp

Locus ID: 18293

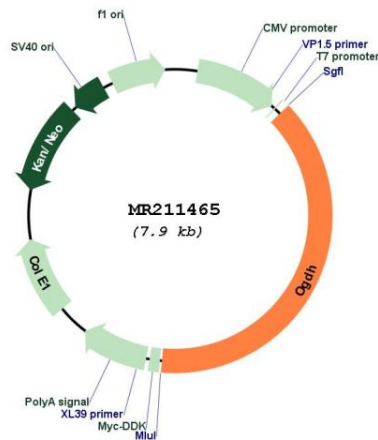
UniProt ID: [Q60597](#)

Cytogenetics: 11 A1

MW: 116.9 kDa

Gene Summary: 2-oxoglutarate dehydrogenase (E1) component of the 2-oxoglutarate dehydrogenase complex, which mediates the decarboxylation of alpha-ketoglutarate. The 2-oxoglutarate dehydrogenase complex catalyzes the overall conversion of 2-oxoglutarate to succinyl-CoA and CO(2). The 2-oxoglutarate dehydrogenase complex is mainly active in the mitochondrion. A fraction of the 2-oxoglutarate dehydrogenase complex also localizes in the nucleus and is required for lysine succinylation of histones: associates with KAT2A on chromatin and provides succinyl-CoA to histone succinyltransferase KAT2A.[UniProtKB/Swiss-Prot Function]

Product images:



Circular map for MR211465