

Product datasheet for MR231493

Ogdh (NM_001252287) Mouse Tagged ORF Clone

Product data:

Product Type: Expression Plasmids
Product Name: Ogdh (NM_001252287) 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: >MR231493 representing NM_001252287
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGATCGCC**

ATGTTTCATTTAAGGACTTGTGCTGCTAAGTTAAGGCCATTGACAGCCTCCAGACTGTTAAGACATTTT
 CACAAAACAAACCAGCAGCAATTAGGACGTTTCAACAGATTCCGGTGTATTCTGCACCTGTAGTGCTGA
 ACCATTTCTTAGTGGGACTAGTTCGAACATGTGGAGGAAATGTACTGTGCCTGGTTGGAGAATCCCAA
 AGTGTACATAAGTCATGGGACATTTTTTCCGAAACACCAATGCTGGAGCCCCACCGGGCACTGCCTACC
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 ACCTAACGTCGACAAACTCGTGGAGGACCATTGGCGGTGCAAGTCTCTCATCAGGGCATATCAGATACGA
 GGGCACCATGTAGCACAGCTGGACCCCTGGGGATTTGGATGCTGATCTGGACTCCTCCGTGCCCGCTG
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 CTTACCCACCACCCTTTTCATCGGGGACAGGAGCCAGCACTTCCCTTCGGGAGATCATCCGTCCGGCTG
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 ACCAGATTGGCTTACCACAGACCCTCGGATGGCCGCTCCTCTCCCTACCCACTGATGTGGCCCGAGT
 GGTGAATGCCCCATTTCCATGTCAACTCAGATGACCCTGAAGTGTGATGATGATGAAGGTGGCA



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GCTGAGTGGAGAAACACCTTCCACAAGGATGTTGTAGTTGATCTGGTGTGTTATCGACGAAATGGCCACA
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ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>MR231493 representing NM_001252287
 Red=Cloning site Green=Tags(s)

MFHLRTCAAKLRPLTASQTVKTFSSQNKPAAIRTFQQIRCYSAAPVAEPFLSGTSSNYVEEMYCAWLENPK
 SVHKSWDIFFRNTNAGAPPGTAYQSPLSLSRSSLATMAHAQSLVEAQPNVDKLVEDHLAVQSLIRAYQIR
 GHHVAQLDPLGILDADLDSSVPADIISSTDKLGFYGLHESDLKVFHLPPTTTFIGGQEPALPLREIIRRL
 EMAYCQHIGVEFMFINDLEQCQWIRQKFETPGIMQFTNEEKRTLLARLVRSTRFEEFLQRKWSSEKRFGL
 EGCEVLIPALKTIIDMSSANGVDYVIMGMPHRGRLNVLANVIRKELEQIFCQFDSKLEAADEGSGDMKYH
 LGMYHRRINRVTDNRNITLSLVANPSHLEAADPVVMGKTKAEQFYCGDTEGKVMISILLHGDAAFAGQGIV
 YETFHLSLPSYTHGTVHVVVNNQIGFTDPRMARSSPYPTDVARVVNAPIFHVNSDDPEAVMYVCKVA
 AEWRNTFHKDVVDLVCYRRNGHNEMDEPMFTQPLMYKQIRKQKPVLPKYAELLVSQGVVNQPEYEEEIS
 KYDKICEEAFTRSKDEKILHIKHWLDSWPGFFTLDGQPRSMTCPTGLEEDVLFHIGKVASSVPVENFT
 IHGGLSRILKTRRELVTNRTVDWALAEYMAFGSLLKEGIHVRLSGQDVERGTFSHRHVHLHDQNVDKRTC
 IPMNLWPNQAPYTVCNSSLSEYGLVGFELGFAMASPNALVLEAQFGDFNNMAQCIIDQFICPGQAKWV
 RQNGIVLLLPHGMEGMGPEHSSARPERFLQMCNDDPDLVLDLQENFDINQLYDCNWIIVNCSTPGNFFH
 VLRRQILLPFRKPLIVFVTPKSLLRHPEARTSFDEMLPGTHFQRVIPENGPAAQDPHKVLRLLFCTGKVVY
 DLTRERKARNMEEVAITRIEQLSPFPDLLLLKEAQKYPNAELAWCQEEHKNQGYDYVVKPRLRTIDRA
 KPWWYAGRDPAAAPATGNKKTHLTELQRFLDLDAFDLDAFKKFS

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites:

Sgfl-MluI

Cloning Scheme:



ACCN: NM_001252287

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_001252287.2](#)

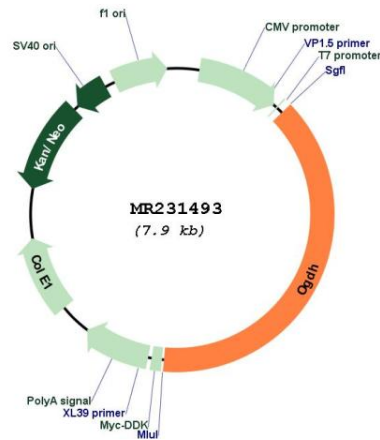
RefSeq Size: 6706 bp

RefSeq ORF: 3072 bp

Locus ID: 18293
UniProt ID: [Q60597](#)
Cytogenetics: 11 A1
MW: 116.4 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 CO₂. 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 MR231493