

Product datasheet for MR231508

Ogdh (NM_001252283) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Ogdh (NM_001252283) 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:	>MR231508 representing NM_001252283 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGC**C

ATGTTTCATTTAAGGACTTGTGCTGCTAAGTTAAGGCCATTGACAGCCTCCAGACTGTTAAGACATTTT
CACAAAACAAACCAGCAGCAATTAGGACGTTTCAACAGATTCCGGTGTATTCTGCACCTGTAGTGCTGA
ACCATTTCTTAGTGGGACTAGTTCGAACATGTGGAGGAAATGTACTGTGCCTGGTTGGAGAATCCCAA
AGTGTACATAAGTCATGGGACATTTTTTCCGAAACACCAATGCTGGAGCCCCACCGGCACTGCCTACC
AGAGCCCCCTTTCCCTGAGTCGAAGCTCCCTGGCTACCATGGCCATGCACAGTCCCTGGTGAAGCACA
ACCTAACGTCGACAAACTCGTGGAGGACCATTGGCGGTGCACTCTCATCAGGGCATATCAGGTCAAG
GGTCACCACATTGCAAACTTGATCCTCTCGGAATTAGTTGTGTAATTTTATGATGCTCCGGTAACTG
TTTCTTCAAACGTGGATCTTGCAGTTTTCAAGAACGACTTCGAATGCTAACAGTAGGAGGGTTCTATGG
CCTACACGAGTCTGACCTTGACAAGGCTTCCACTTACCACCACCCTTTCATCGGGGGACAGGAGCCA
GCATTCCTCTTCGGGAGATCATCCGTCGGCTGGAGATGGCCTACTGCCAGCACATTGGTGTGGAGTTCA
TGTTCAATTAATGATTTGGAACAATGCCAGTGGATCCGACAGAAGTTTGAGACCCCTGGAATCATGCAGTT
CACCAATGAGGAGAAGCGGACCTTGTGTCAGGCTGTGAGGTGCTGATCCCTGCCCTCAAGACAA
CGAAAGTGGTCTCGGAGAAGCGTTTTGGTCTGGAAGGCTGTGAGGTGCTGATCCCTGCCCTCAAGACAA
TCATTGATATGTCAAGTCAAAATGGAGTGGACTATGTGATCATGGGGATGCCACACAGAGGACGGCTGAA
CGTGCTTGCAAAATGTCATCAGGAAGGAGCTGGAGCAAATATTCTGTGAGTTTACTCAAAGCTGGAGGCA
GCTGATGAGGGTTCTGGGACATGAAGTACCACCTGGGCATGTATCACCGCAGGATCAACCGTGTGACCG
ACAGAAACATCACTTTGTCCTTGGTGGCTAACCTTCCCATCTAGAGGCTGCTGACCCTGTCGTGATGGG
AAAGACCAAAGCTGAACAGTTCTACTGTGGAGACTGAAGGGAAAAAGGTGATGTCTATCTGCTGCAT
GGGGATGCTGCTTTTGTGGCCAGGGCATCGTATATGAGACCTTCCATCTCAGCGACTTGCCGCTCTACA
CAACCCATGGCACTGTTTCATGTGGTTGTCAACAACAGATTGGCTTACCACAGACCCTCGGATGGCCCC
CTCCTCTCCCTACCCACTGATGTGGCCGAGTGGTGAATGCCCCATTTTCCATGTCAACTCAGATGAC



[View online >](#)

CCTGAAGCTGTCATGTATGTATGCAAGGTGGCAGCTGAGTGGAGAAACACCTCCACAAGGATGTTGTAG
 TTGATCTGGTGTATTATCGACGAAATGGCCACAATGAGATGGACGAACCTATGTTTACACAGCCACTCAT
 GTACAAGCAGATCCGCAAGCAGAAGCCTGTACTGCAGAAGTATGCAGAATTGCTAGTCTCCCAGGGTGTG
 GTCAATCAGCCTGAGTACGAGGAGGAAATCTCCAAGTATGATAAGATCTGTGAGGAAGCATTTACCAGAT
 CCAAAGATGAGAAGATCTTGACATCAAGCACTGGCTGGATTCCCCTGGCTGGCTTTTACCCTGGA
 TGGACAGCCCAGGAGCATGACCTGCCCTCCACTGGCTGGAGGAGGATGCTTGTCCACATTGGAAG
 GTGGCCAGCTCTGTACCTGTGGAGAACTTACTATCCATGGAGGGCTGAGCCGGATCTTGAAGACCCGCA
 GAGAGCTTGTGACGAACCGGACTGTGACTGGCCCTGGCAGAGTACATGGCATTGGCTACTGCTGAA
 GGAAGGCATCCATGTGCGGCTGAGTGGCCAGGATGTGGAGCGGGCACCTTCAGCCATCGCCACCATGTG
 CTCCATGATCAGAATGTTGACAAAAGAACCTGCATCCCCATGAACCACCTTTGGCCAAATCAGGCCCTT
 ACACTGTATGCAACAGCTCGCTGTCTGAGTACGGTGTCTGGGCTTTGAGCTGGGCTTTGCCATGGCTAG
 CCCTAATGCTCTGGTTCTCTGGGAGGCCAGTTTGGTACTTCAACAACATGGCACAGTGCATCATTGAC
 CAGTTCATCTGCCAGGACAGGCAAAAGTGGTGCAGCAGAAATGGCATTGTGCTCCTGCTGCCTCATGGCA
 TGAAGGCATGGGTCCCAGCATTCTCTGCCCGCCAGAGCGGTTTCTGCAGATGTGCAATGATGACCC
 AGATGTCTGCCTGACCTGCAGGAAGAAAACCTTTCATCAATCAGCTCTATGACTGCAACTGGATTGTT
 GTCAACTGTTCCACCCTGGCAACTTCTCCATGTGCTGCGACGACAGATCTTGCTGCCCTTCCGGAAGC
 CGTTAATCGTCTTCACTCCCAAATCCCTCCTGCGCCACCCTGAGGCAAGAACTAGCTTTGACGAGATGCT
 GCCAGGAACGCACTTCCAGCGTGTGATCCAGAAAATGGACCTGCAGCTCAGGACCCACAAAAGTCAAG
 AGACTTCTTCTGCACTGGGAAGGTGTACTATGACCTCACCCGAGAGCGCAAAGCCAGGAACATGGAGG
 AGGAGTGGCTATTACAAGGATTGAGCAGCTATCACCATTCCCCTTTGACCTCCTGCTGAAAAGAGGCACA
 GAAGTATCCCAATGCTGAGCTGGCTGGTGCAGGAAGAGCACAAGAACCAAGGCTACTATGACTATGTC
 AAGCCAAGACTTCGTACCACATTGACCGTCTAAGCCTGTCTGGTATGCTGGCCGAGACCCGGCAGCTG
 CTCCAGCCACTGGCAACAAGAAAACACCTGCACAGAGCTGCAGCGCTTCTGGACACAGCCTTTGACCT
 GGACGCATTCAAGAAATCTCT

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>MR231508 representing NM_001252283

Red=Cloning site Green=Tags(s)

MFHLRTCAAKLRPLTASQTVKTF SQNKPAAIRTFQQIRCY SAPVAAEPFLSGTSSNYVEEMYCAWLENPK
 SVHKSWDIFFRNTNAGAPPGTAYQSPLSLSRSSLATMAHAQSLVEAQPNDKLVEDHLAVQSLIRAYQVR
 GHIIAKLDPLGISCVNFDDAPVTVSSNVDLAVFKERLRMLTVGGFYGLHESDLKVFHLPTTTFIGGQEP
 ALPLREIIRRLEMAYCQHIGVEFMFINDLEQCQWIRQKFETPGIMQFTNEEKRTLLARLVRSTRFEEFLQ
 RKWSSEKRFGLGCEVLIPALKTIIDMSSANGVDYVIMGMPHRGRLNVLANVIRKELEQIFCQFDSKLEA
 ADEGSGDMKYHLGMYHRRINRVTDNRNITLSLVANPSHLEAADPVVMGKTKAEQFYCGDTEGKKVMSILLH
 GDAAFAGQGIVYETFHLSLPSYTHGTVHVVVNNQIGFTDPRMARSSPYPTDVARVVNAPIFHVNSDD
 PEAVMYVCKVAAEWRNTFHKDVVVDLVCYRRNGHNEMDEPMTQPLMYKQIRKQKPVLPQYAEALLVSQGV
 VNQPEYEEEISKYDKICEEAFTRSKDEKILHIKHWLDSWPWGF TLDGQPRSMTC PSTGLEEDVLFHIGK
 VASSVPVENFTIHGGLSRILKTRRELVTNRVDWALAEYMAFGSLLKEGIVRLSGQDVERGTFSHRHHV
 LHDQNVDKRTCIPMNLWPNQAPYTVCNSSLSEYGVLFELGFAMASPNALVLWEAQGFDFNMAQCIIID
 QFICPGQAKWVRQNGIVLLLPHGMEGMGPEHSSARPERFLQMCNDPDPVLPDLQENFDINQLYDCNWIV
 VNCSTPGNFFHVLRRQIILLPFRKPLIVF TPKSLLRHPEARTSFDEMLPGTHFQRVIPENGPAAQDPHKVK
 RLLFCTGKVVYDLTRERKARNMEEVAITRIEQLSPFPFDLLLKEAQKYPNAELAWCQEEHKNQGYDYV
 KPRLRTTIDRAKPVWYAGRDPAAAPATGNKKTHLTELQRFLDLDAFKKFS

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites:

SgfI-MluI

Cloning Scheme:



ACCN: NM_001252283

ORF Size: 3102 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_001252283.1](#), [NP_001239212.1](#)

RefSeq Size: 6663 bp

RefSeq ORF: 3105 bp

Locus ID: 18293

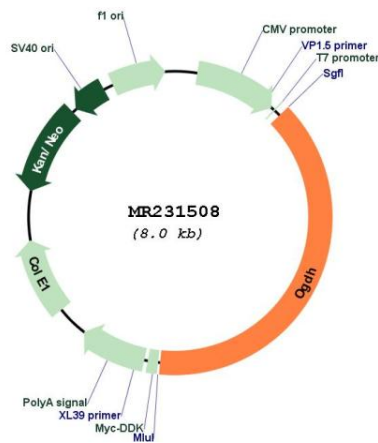
UniProt ID: [Q60597](#)

Cytogenetics: 11 A1

MW: 118.2 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 MR231508