

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
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Cell Selection:	Neomycin
ORF Nucleotide Sequence:	>MR231508 representing NM_001252283 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGTTTCATTTAAGGACTTGTGCTGCTAAGTTAAGGCCATTGACAGCCTCCAGACTGTTAAGACATTTT
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ACCATTTCTTAGTGGGACTAGTTCGAATATGTGGAGGAAATGTACTGTGCCTGGTTGGAGAATCCCAAA
AGTGACATAAGTCATGGGACATTTTTTCCGAAACACCAATGCTGGAGCCCCACCGGGCACTGCCTACC
AGAGCCCCCTTTCCCTGAGTCGAAGCTCCCTGGCTACCATGGCCCATGCACAGTCCCTGGTGAAGCACA
ACCTAACGTGCAAACTCGTGGAGGACCACTGGCGGTGCAGTCTCTCATCAGGGCATATCAGGTCAGG
GGTCACCACATTGCAAACTTGATCCTCTCGGAATTAGTTGTGTAATTTTGTGATGCTCCGGTAACTG
TTTCTTCAAACGTGGATCTTGCAGTTTTCAAGGAACGACTTCGAATGCTAACAGTAGGAGGGTCTATGG
CCTACACGAGTCTGACCTTGACAAGGTCTTCCACTTACCACCACCACTTTCATCGGGGGACAGGAGCCA
GCACCTTCTTTCGGGAGATCATCCGTCGGCTGGAGATGGCCTACTGCCAGCACATTGGTGTGGAGTTC
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CCTGAAGCTGTATGTATGCAAGGTGGCAGCTGAGTGGAGAAACACCTTCCACAAGGATGTTGTAG



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TTGATCTGGTGTATTATCGACGAAATGGCCACAATGAGATGGACGAACCTATGTTTACACAGCCACTCAT
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Protein Sequence:

>MR231508 representing NM_001252283
 Red=Cloning site Green=Tags(s)

MFHLRTCAAKLRPLTASQTVKTFSSQNKPAAIRTFQQIRCYSAAPVAEPFLSGTSSNYVEEMYCAWLENPK
 SVHKSWDIFFRNTNAGAPPGTAYQSPLSLSRSSLATMAHAQSLVEAQPNVDKLVEDHLAVQSLIRAYQVR
 GHIIAKLDPLGISCVNFDDAPVTYSSNVDLAVFKERLRMLTVGGFYGLHESDLKVFHLPTTTFIGGQEP
 ALPLREIIRRLEMAYCQHIGVEFMFINDLEQCQWIRQKFETPGIMQFTNEEKRTLLARLVRSTRFEFLQ
 RKWSSEKRFGLGCEVLIPALKTIIDMSSANGVDYVIMGMPHRGRLNVLANVIRKELEQIFCQFDSKLEA
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 VNQPEYEEEISKYDKICEEAFTRSKDEKILHIKHWLDSWPWGFLLDGGQPRSMTCPTGLEEDVLFHIGK
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 QFICPGQAKWVRQNGIVLLLPHGMEGMGPEHSSARPERFLQMCNDPDPVLPDLQEENFDINQLYDCNWI
 VNCSTPGNFFHVLRRQILLPFRKPLIVFVTPKSLLRHPEARTSFDEMLPGTHFQRVIPENGPAAQDPHKVK
 RLLFCTGKVVYDLTRERKARNMEEVAITRIEQLSPFPDLLLLKEAQKYPNAELAWCQEEHKNQGYDYV
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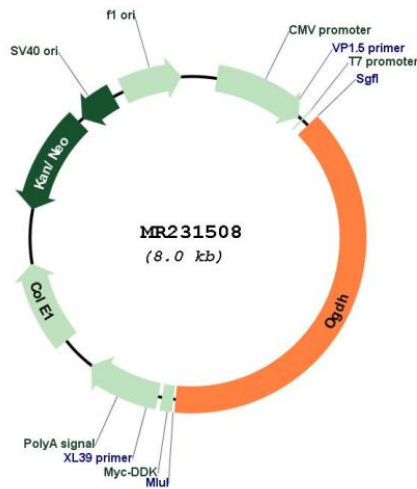
Restriction Sites:

Sgfl-Mlul

Cloning Scheme:



Plasmid Map:



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:	<ol style="list-style-type: none">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:	<u>NM_001252283.1</u> , <u>NP_001239212.1</u>
RefSeq Size:	6663 bp
RefSeq ORF:	3105 bp
Locus ID:	18293
UniProt ID:	<u>Q60597</u>
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]