

Product datasheet for **MG211465**

Ogdh (NM_010956) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Ogdh (NM_010956) Mouse Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Ogdh
Synonyms:	2210403E04Rik; 2210412K19Rik; AA409584; d1401; mKIAA4192
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>MG211465 representing NM_010956 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCCGCC**CGATCGC**

ATGTTTCATTTAAGGACTTGTGCTGCTAAGTTAAGGCCATTGACAGCCTCCCAGACTGTTAAGACATTTT
CACAAAACAAACCAGCAGCAATTAGGACGTTTCAACAGATTCCGGTCTATTCTGCACCTGTAGTCTGCTGA
ACCATTTCTTAGTGGGACTAGTTCGAATATGTGGAGGAAATGTACTGTGCCTGGTTGGAGAATCCCAA
AGTGTACATAAGTCATGGGACATTTTTTCCGAAACACCAATGCTGGAGCCCCACCGGGCACTGCCTACC
AGAGCCCCCTTTCCCTGAGTCGAAGCTCCCTGGCTACCATGGCCCATGCACAGTCCCTGGTGAAGCACA
ACCTAACGTCGACAAACTCGTGGAGGACCATTGGCGGTGCACTCTCATCAGGGCATATCAGATACGA
GGGCACCATGTAGCACAGCTGGACCCCTGGGGATTTGGATGCTGATCTGGACTCCTCCGTGCCCGCTG
ACATTATCTCATCCACAGACAAACTTGGGTTCTATGGCCTACACGAGTCTGACCTTGACAAGGTCTTCCA
CTTACCCACCACCACTTTTCATCGGGGACAGGAGCCAGCACTTCCCTTCGGGAGATCATCCGTCCGGCTG
GAGATGGCCTACTGCCAGCACATTGGTGTGGAGTTCATGTTCAATGATTTGGAACAATGCCAGTGGA
TCCGACAGAAGTTGAGACCCCTGGAATCATGCAGTTCACCAATGAGGAGAAGCGGACCTTGCTGGCCAG
GCTTGTACGATCCACCAGTTTGGAGGTTCCACAGCGAAAGTGGTCCCTCGGAGAAGCGTTTTGGTCTG
GAAGGCTGTGAGGTGCTGATCCCTGCCCTCAAGACAATCATTGATATGTCAGTGCAAATGGAGTGGAT
ATGTGATCATGGGGATGCCACACAGAGGACGGCTGAACGTGCTTGCAAATGTCATCAGGAAGGAGCTGGA
GCAAATATTCTGTGAGTTTACTCAAAGCTGGAGGCAGCTGATGAGGGTCTGGGGACATGAAGTACCAC
CTGGGCATGTATCACCAGGATCAACCGTGTGACCGACAGAAACATCACTTTGTCCTTGGTGGCTAACC
CTTCCCATCTAGAGGCTGCTGACCCTGTCGTGATGGGAAAGACCAAGCTGAACAGTTCTACTGTGGAGA
CACTGAAGGGAAAAAGGTGATGTCTATCCTGCTGCATGGGGATGCTGCTTTTGTGGCCAGGGCATCGTA
TATGAGACCTTCCATCTCAGCGACTTGCCGCTCACACAACCCATGGCACTGTTTCATGTGGTTGTCAACA
ACCAGATTGGCTTACCACAGACCCTCGGATGGCCGCTCCTCTCCCTACCCCACTGATGTGCCCGGAGT
GGTGAATGCCCCATTTCCATGTCAACTCAGATGACCCTGAAGTGTGATGATGATGAAGGTGGCA



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GCTGAGTGGAGAAACACCTTCCACAAGGATGTTGTAGTTGATCTGGTGTGTTATCGACGAAATGGCCACA
 ATGAGATGGACGAACCTATGTTTACACAGCCACTCATGTACAAGCAGATCCGCAAGCAGAAGCCTGTACT
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 TGGCCTGGAGGAGGATGCTTGTCCACATTGAAAGGTGGCCAGCTCTGTACCTGTGGAGAAGTTTACT
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 TGGTGACTTCAACAACATGGCACAGTGCATCATTGACCAGTTCATCTGCCAGGACAGGCAAAAGTGGGTG
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 GCCAGAGCGGTTCTGCAGATGTCAATGATGACCCAGATGCTCCTGCCTGACCTGCAGGAAGAAAAGTT
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 GCCACCCTGAGGCAAGAACTAGCTTTGACGAGATGCTGCCAGGAACGCACCTTCCAGCGTGTGATCCAGA
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 GACCTCACCCGAGAGCGCAAAGCCAGGAACATGGAGGAGGAGGTGGCTATTACAAGGATTGAGCAGCTAT
 CACCATTCCCCTTTGACCTCCTGCTGAAAGAGGACAGAAAGTATCCCAATGCTGAGCTGGCCTGGTGCCA
 GGAAGAGCACAAGAACCAAGGCTACTATGACTATGTCAAGCCAAGACTTCGTACCACCATGACCGTGT
 AAGCCTGTCTGGTATGCTGGCCGAGACCCGGCAGCTGCTCCAGCCACTGGCAACAAGAAAACACACTGA
 CAGAGCTGCAGCGCTTTCTGGACACAGCCTTTGACCTGGACGCATTCAAGAAATTCTCT

ACGCGTACGCGGCCGCTCGAG – GFP Tag – GTTTAA

Protein Sequence:

>MG211465 representing NM_010956
 Red=Cloning site Green=Tags(s)

MFHLRTCAAKLRPLTASQTVKTFSSQNKPAAIRTFQQIRCY SAPVAAEPFLSGTSSNYVEEMYCAWLENPK
 SVHKSWDIFFRNTNAGAPPGTAYQSPLSLSRSSLATMAHAQSLVEAQPNDKLVEDHLAVQSLIRAYQIR
 GHVVAQLDPLGILDADLDSSVPADIISSTDKLG FYGLHESDLKVFHLPTTTFIGGQEPALPLREIIRRL
 EMAYCQHIGVEFMFINDLEQCQWIRQKFETPGIMQFTNEEKRTLLARLVRSTRFEEFLQRKWSSEKRFGL
 EGCEVLIPALKTIIDMSSANGVDYVIMGMPHRGRLNVLANVIRKELEQIFCQFDSKLEAADESGDMKYH
 LGMYHRRINRVTDNRNITLSLVANPSHLEAADPVVMGKTKAEQFYCGDTEGKKVMSILLHGDAAFAGQGIV
 YETFHLSDLPSYTHGTVHVNNQIGFTTDPMARSSPYPTDVARVVNAPIFHVNSDDPEAVMYVCKVA
 AEWRNTFHKDVVDLVCYRRNGHNEMDEPMFTQPLMYKQIRKQKPVLPKYAELLVSQGVNQPEYEEEIS
 KYDKICEEAFTRSKDEKILHIKHWLDSWPFGFTLDGQPRSMTC PSTGLEEDVLFHIGKVASSVPVENFT
 IHGGLSRILKTRRELVTNRTVDWALAEYMAFGSLLKEGIHVRLSGQDVERGTFSHRHVHLHDQNVDKRTC
 IPMNLWPNQAPYTVCNSSLSEYGVLFELGFAMASPNALVLEAQFGDFNMAQCIIDQFICPGQAKWV
 RQNGIVLLLPHGMEGMGPEHSSARPERFLQMCNDDPDVLPDLQEENFDINQLYDCNWIIVNCSTPGNFFH
 VLRQIILLPFRKPLIVFVTPKSLLRHPEARTSFDEMLPGTHFQRVIPENGPAAQDPHKVKRLLFCTGKVVY
 DLTRERKARNMEEVAITRIEQLSPFPDLLLLKEAQKYPNAELAWCQEEHKNQGYDYVVKPRLRTTIDRA
 KPVVYAGRDPAAAPATGNKKTHLTELQRFLDLDAFKKFS

TRTRPLE – GFP Tag – V

Restriction Sites:

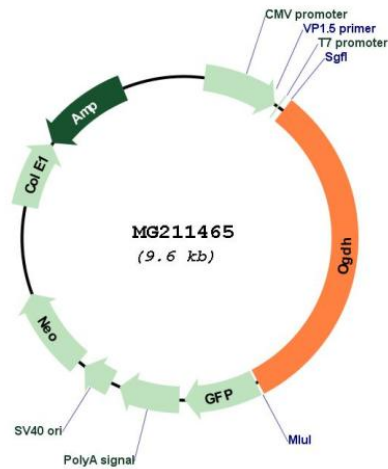
Sgfl-MluI

Cloning Scheme:

Cloning sites used for ORF Shutting:



Plasmid Map:



ACCN: NM_010956
 ORF Size: 3069 bp

OTI Disclaimer:	<p>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.</p> <p>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</p>
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:	NM_010956.4 , NP_035086.2
RefSeq Size:	6630 bp
RefSeq ORF:	3072 bp
Locus ID:	18293
UniProt ID:	Q60597
Cytogenetics:	11 A1
Gene Summary:	<p>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]</p>