

## Product datasheet for **MC229282**

### Ogdh (NM\_001252287) Mouse Untagged Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Ogdh (NM_001252287) Mouse Untagged Clone
Tag:	Tag Free
Symbol:	Ogdh
Synonyms:	2210403E04Rik; 2210412K19Rik; AA409584; d1401; mKIAA4192
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Cell Selection:	Neomycin
Fully Sequenced ORF:	>MC229282 representing NM_001252287 Red=Cloning site Blue=ORF Orange=Stop codon

TTTTGTAATACGACTCACTATAGGGCGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**GCGATCGCC**

ATGTTTCATTTAAGGACTTGTGCTGCTAAGTTAAGGCCATTGACAGCCTCCAGACTGTTAAGACATTTT  
CACAAAACAAACCAGCAGCAATTAGGACGTTTCAACAGATTCCGGTCTATTCTGCACCTGTAGCTGCTGA  
ACCATTTCTTAGTGGGACTAGTTCGAATATGTGGAGGAAATGTACTGTGCCTGGTTGGAGAATCCCAAA  
AGTGACATAAGTCATGGGACATTTTTTCCGAAACACCAATGCTGGAGCCCACCGGGCACTGCCTACC  
AGAGCCCCCTTTCCCTGAGTCGAAGCTCCCTGGCTACCATGGCCCATGCACAGTCCCTGGTGAAGCACA  
ACCTAACGTGCACAACTCGTGGAGGACCACTGGCGGTGCAGTCTCTCATCAGGGCATATCAGATACGA  
GGGCACCATGTAGCACAGCTGGACCCCCCTGGGATTTTGGATGCTGATCTGGACTCCTCCGTGCCCGCTG  
ACATTATCTCATCCACAGACAACTTGGGTTCTATGGCTACACGAGTCTGACCTTGACAAGGTCTTCCA  
CTTACCCACCACACTTTTCATCGGGGACAGGAGCCAGCACTTCTCTTCGGGAGATCATCCGTCCGCTG  
GAGATGGCCTACTGCCAGCACATTGGTGTGGAGTTCATGTTTAAATGATTTGGAACAATGCCAGTGGA  
TCCGACAGAAGTTTGAGACCCCTGGAATCATGCAGTTTACCAATGAGGAGAAGCGGACCTTGCTGGCCAG  
GCTTGTACGATCCACCAGTTTGGAGGATTCCTACAGCGAAAGTGGTCCCGGAGAAAGCGTTTTTGGTCTG  
GAAGGCTGTGAGGTGCTGATCCCTGCCCTCAAGACAATCATTGATATGTCAAGTGCAAATGGAGTGGACT  
ATGTGATCATGGGGATGCCACACAGAGGACGGCTGAACGTGCTTGCAAATGTCATCAGGAAGGAGCTGGA  
GCAAATATTCTGTGAGTTTACTCAAAGCTGGAGGACGCTGATGAGGGTTCTGGGGACATGAAGTACCAC  
CTGGGCATGTATCACCAGGATCAACCGTGTGACCGACAGAAACATCACTTTGCTCTGGTGGCTAACC  
CTTCCCATCTAGAGGCTGCTGACCCTGCTGATGGGAAAGACCAAGCTGAACAGTTTCTACTGTGGAGA  
CACTGAAGGGAAAAGGTGATGTCTATCCTGCTGCATGGGGATGCTGCTTTTGTGGCCAGGGCATCGTA  
TATGAGACCTTCCATCTCAGCGACTTGGCTCCTACACAACCCATGGCACTGTTTATGTGGTTGTCAACA  
ACCAGATTGGCTTACCACAGACCTCGGATGGCCCGCTCCTCTCCCTACCCCACTGATGTGGCCCGAGT  
GGTGAATGCCCCATTTTCCATGTCAACTCAGATGACCCTGAAGCTGTCATGTATGTATGAAGGTGGCA  
GCTGAGTGGAGAAACACCTTCCACAAGGATGTTGTAGTTGATCTGGTGTGTTATCGACGAAATGGCCACA



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ATGAGATGGACGAACCTATGTTTACACAGCCACTCATGTACAAGCAGATCCGCAAGCAGAAGCCTGTACT  
 GCAGAAGTATGCAGAATTGCTAGTCTCCCAGGGTGTCTCAATCAGCCTGAGTACGAGGAGAAATCTCC  
 AAGTATGATAAGATCTGTGAGGAAGCATTTACCAGATCCAAGATGAGAAGATCTTGACATCAAGCACT  
 GGCTGGATTCCCCTGGCTGGCTTTTTTACCCTGGATGGACAGCCCAGGAGCATGACCTGCCCTCCAC  
 TGGCCTGGAGGAGGATGTCTTGTCCACATTGAAAGGTGGCCAGCTCTGTACCTGTGGAGAAGTTACT  
 ATCCATGGAGGGCTGAGCCGGATCTTGAAGACCCGCAGAGAGCTTGTGACGAACCGGACTGTGGACTGGG  
 CCTGGCAGAGTACATGGCATTGGCTCACTGCTGAAGGAAGGCATCCATGTGCGGCTGAGTGGCCAGGA  
 TGTGGAGCGGGCACCTTCAGCCATCGCCACCATGTGCTCCATGATCAGAATGTTGACAAAAGAACCTGC  
 ATCCCCATGAACCACCTTTGGCCAAATCAGGCCCTTACACTGTATGCAACAGCTCGCTGTCTGAGTACG  
 GTGCTCTGGGCTTTGAGCTGGGCTTTGCCATGGCTAGCCCTAATGCTCTGGTTCTCTGGGAGGCCAGTT  
 TGGTGACTTCAACAACATGGCACAGTGCATCATTGACCAGTTCATCTGCCAGGACAGGCAAAGTGGGTG  
 CGGCAGAAATGGCATTGTCTCCTGCTGCCTCATGGCATGGAAGGCATGGTCCCAGCATTCTCTGCC  
 GCCAGAGCGGTTTCTGCAGATGTCAATGATGACCCAGATGCTCCTGCCTGACCTGCAGGAAGAAAAGTT  
 TGACATCAATCAGCTCTATGACTGCAACTGGATTGTTGTCAACTGTTCCACCCCTGGCAACTTCTCCAT  
 GTGCTGCGACGACAGATCTTGTGCCCTCCGGAAGCCGTTAATGCTCTCACTCCAAAATCCCTCTGC  
 GCCACCCTGAGGCAAGAACTAGCTTTGACGAGATGCTGCCAGGAACGCACCTTCCAGCGTGTGATCCAGA  
 AAATGGACCTGCAGCTCAGGACCCACACAAAGTCAAGAGACTTCTTCTGCACTGGGAAGGTGACTAT  
 GACCTCACCCGAGAGCGCAAAGCCAGGAACATGGAGGAGGAGGTGGCTATTACAAGGATTGAGCAGCTAT  
 CACCATTCCCCTTTGACCTCCTGCTGAAAGAGGCACAGAAGTATCCCAATGCTGAGCTGGCTGGTGCCA  
 GGAAGAGCACAAGAACCAAGGCTACTATGACTATGTCAAGCCAAGACTTCGTACCACCATTGACCGTGCT  
 AAGCCTGTCTGGTATGCTGGCCGAGACCCGGCAGCTGCTCCAGCCACTGGCAACAAGAAAACACACCTGA  
 CAGAGCTGCAGCGCTTTCTGGACACAGCCTTTGACCTGGACGCATTCAAGAAATTCTCTAG

ACGCGTACGCGCGGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
 ACAAGGATGACGACGATAAGGTTTAA

- Restriction Sites:** SgfI-MluI
- ACCN:** NM\_001252287
- Insert Size:** 3072 bp
- OTI Disclaimer:** Our molecular clone sequence data has been matched to the reference identifier above as a point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative RNA splicing form or single nucleotide polymorphism (SNP).
- OTI Annotation:** Clone contains native stop codon, and expresses the complete ORF without any c-terminal tag.
- 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\\_001252287.1](#), [NP\\_001239216.1](#)

RefSeq Size: 6706 bp

RefSeq ORF: 3072 bp

Locus ID: 18293

UniProt ID: [Q60597](#)

Cytogenetics: 11 A1

**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<sub>2</sub>. 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] Transcript Variant: This variant (3) differs in the 5' UTR and a region of the coding sequence, compared to variant 1. The resulting isoform (3) has a shorter and different internal segment, compared to isoform 1. Variants 3, 4 and 8 encode the same isoform (3). Sequence Note: This RefSeq record was created from transcript and genomic sequence data to make the sequence consistent with the reference genome assembly. The genomic coordinates used for the transcript record were based on transcript alignments.