OriGene Technologies, Inc.
9620 Medical Center Drive, Ste 200
Rockville, MD 20850, US
Phone: +1-888-267-4436
https://www.origene.com
techsupport@origene.com
EU: info-de@origene.com
CN: techsupport@origene.cn

Product datasheet for SC324589

OGDH (NM_002541) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	OGDH (NM_002541) Human Untagged Clone
Tag:	Tag Free
Symbol:	OGDH
Synonyms:	AKGDH; E1k; KGD1; OGDC; OGDH2
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC (PS100020)
E. coli Selection:	Ampicillin (100 ug/mL)

Fully Sequenced ORF:

```
>OriGene sequence for NM_002541.2
CTGAGCCGGAGACAGGCAGTTGTGAAAAACTTCAGGACAAAAATGTTTCATTTAAGGACT
TGTGCTGCTAAGTTGAGACCATTGACGGCTTCCCAGACTGTTAAGACATTTTCACAAAAC
AGACCAGCAGCAGCTAGGACATTTCAACAGATTCGGTGCTATTCTGCACCTGTTGCTGCT
GAGCCCTTTCTCAGTGGGACTAGTTCGAACTATGTGGAGGAGATGTACTGTGCTTGGCTG
GAAAACCCCAAAAGTGTACATAAGTCATGGGACATTTTTTTTCGCAACACGAATGCCGGA
GCCCCACCGGGCACTGCCTACCAGAGTCCCCTTCCCCTGAGCCGAGGCTCCCTGGCTGCT
GTGGCCCATGCACAGTCCCTGGTAGAAGCACAGCCCAACGTGGACAAGCTCGTGGAGGAC
CACCTGGCAGTGCAGTCGCTCATCAGGGCATATCAGATACGAGGGCACCATGTAGCACAG
CTGGACCCCCTGGGGATTTTGGATGCTGATCTGGACTCCTCCGTGCCCGCTGACATTATC
TCATCCACAGACAAACTTGGGTTCTATGGCCTGGATGAGTCTGACCTCGACAAGGTCTTC
CACTTGCCCACCACCACTTTCATCGGGGGACAGGAATCAGCACTTCCTCTGCGGGAGATC
ATCCGTCGGCTGGAGATGGCCTACTGCCAGCATATTGGGGTGGAGTTCATGTTCATCAAT
GACCTGGAGCAGTGCCAGTGGATCCGGCAGAAGTTTGAGACCCCTGGGATCATGCAGTTC
ACAAATGAGGAGAAACGGACCCTGCTGGCCAGGCTTGTGCGGTCCACCAGGTTTGAGGAG
TTCCTACAGCGGAAGTGGTCCTCTGAGAAGCGCTTTGGTCTAGAAGGCTGCGAGGTACTG
ATCCCTGCCCTCAAGACCATCATTGACAAGTCTAGTGAGAATGGCGTGGACTACGTGATC
ATGGGCATGCCACACAGAGGGCGGCTGAACGTGCTTGCAAATGTCATCAGGAAGGAGCTG
GAACAGATCTTCTGTCAATTCGATTCAAAGCTGGAGGCAGCTGATGAGGGCTCCGGAGAT
GTGAAGTACCACCTGGGCATGTATCACCGCAGGATCAATCGTGTCACCGACAGGAACATT
ACCTTGTCCTTGGTGGCCAACCCTTCCCACCTTGAGGCCGCTGACCCCGTGGTGATGGGC
AAGACCAAAGCCGAACAGTTTTACTGTGGCGACACTGAAGGGAAAAAGGTCATGTCCATC
CTGTTGCATGGGGATGCTGCATTTGCTGGCCAGGGCATTGTGTACGAGACCTTCCACCTC
AGCGACCTGCCATCCTACACAACTCATGGCACCGTGCACGTGGTCGTCAACAACCAGATC
GGCTTCACCACCGACCCTCGGATGGCCCGCTCCTCCCCCTACCCCACTGACGTGGCCCGA
GTGGTGAATGCCCCCATTTTCCACGTGAACTCAGATGACCCCGAGGCTGTCATGTACGTG
TGCAAAGTGGCGGCCGAGTGGAGGAGCACCTTCCACAAGGACGTGGTTGTCGATTTGGTG
```


View online »

TGTTACCGGCGCAACGGCCACAACGAGATGGATGAGCCCATGTTCACGCAGCCGCTCATG
TACAAGCAGATCCGCAAGCAGAAGCCTGTGTTACAGAAGTACGCTGAGCTGCTGGTGTCG
CAGGGTGTGGTCAACCAGCCTGAGTATGAGGAGGAAATTTCCAAGTATGATAAGATCTGT
GAGGAAGCTTTTGCCAGATCTAAAGATGAGAAGATCTTGCACATTAAGCACTGGCTGGAC
TCTCCCTGGCCTGGCTTCTTCACCCTGGACGGGCAGCCCAGGAGCATGTCCTGCCCCTCC
ACGGGTCTGACGGAGGATATTCTGACACACATCGGGAATGTGGCTAGTTCTGTGCCTGTG
GAAAACTTTACTATTCATGGAGGGCTGAGCCGGATCTTGAAGACTCGTGGGGAAATGGTG
AAGAACCGGACTGTGGACTGGGCTCTAGCGGAGTACATGGCGTTTGGCTCGCTCCTGAAG
GAGGGCATCCACATTCGGCTGAGCGGCCAGGACGTGGAGCGGGGCACATTCAGCCACCGC
CACCATGTGCTCCATGACCAGAATGTGGACAAGAGAACCTGCATCCCCATGAACCATCTC
TGGCCCAATCAGGCCCCCTATACTGTGTGCAACAGCTCACTGTCTGAGTACGGCGTGCTG
GGCTTTGAGCTGGGCTTCGCCATGGCCAGTCCTAATGCCCTGGTCCTCTGGGAAGCCCAA
TTTGGTGACTTCCACAACACGGCCCAGTGTATCATCGACCAGTTCATCTGCCCGGGACAA
GCCAAGTGGGTGCGGCAGAATGGCATCGTGTTGCTGCTGCCCCATGGCATGGAGGGCATG
GGTCCAGAACATTCCTCCGCCCGCCCAGAGCGGTTCTTGCAGATGTGCAACGATGACCCA
GATGTCCTGCCAGACCTTAAAGAAGCCAACTTCGACATCAATCAGCTATATGACTGCAAT
TGGGTTGTTGTCAACTGCTCCACTCCTGGCAACTTCTTCCACGTGCTACGACGCCAGATC
CTGCTGCCATTCCGGAAGCCGTTAATTATCTTCACCCCCAAATCCCTGTTGCGCCACCCC
GAGGCCAGATCCAGCTTTGATGAGATGCTTCCAGGAACCCACTTCCAGCGGGTGATCCCA
GAAGATGGCCCTGCAGCTCAGAACCCAGAAAATGTCAAAAGGCTTCTCTTCTGCACCGGC
AAAGTGTATTATGACCTCACCCGGGAGCGCAAAGCACGCGACATGGTGGGGCAGGTGGCC
ATCACAAGGATTGAGCAGCTGTCGCCATTCCCCTTTGACCTCCTGCTGAAGGAGGTGCAG
AAGTACCCCAATGCTGAGCTGGCCTGGTGCCAGGAGGAGCACAAGAACCAAGGCTACTAT
GACTACGTGAAGCCAAGACTTCGGACCACCATCAGCCGCGCCAAGCCCGTCTGGTATGCC
GGCCGGGACCCAGCGGCTGCTCCAGCCACCGGCAACAAGAAGACCCACCTGACGGAGCTG
CAGCGCCTCCTGGACACGGCCTTCGACCTGGACGTCTTCAAGAACTTCTCGTAGATGCTG
CCTAGGGTTGCTTGGGCCACTGCCCTCTCCACACCCATGACTGCCCCTTGCTTCTCAACT
AAAGAATAGTGCCTCAGCGCTGCCCACACCACCGCCCTCCTCGCTGTGCCACCACCCCTC
CCTCTGCTCTCATAGGAGTTAGGCTGTCGTCCCCCTCCAGTGCTTGGCTGCCCCACAGGC
CACACGCTGCCCAGGCTCTGCTGACTTCTGAGCAGTTTTCCAGGAGGCCGGGGGGAGCAG
GAGCAGGAAAGGTAGCCCCCGAGGGATGTCCTTGGGGAGGGGTCAGCTCTGGCCACAATC
CTCCCCACCAGTCTCACCCACTAGGATAGGAACTGGGCCTTGTGTGCTGGCTTCCGCTGT
CACCCAGCAAGGCACAGGCTCCTGTATTTGAGACTAGGATAGCTTCATCTTGAGCCTGAG
CCTTAGAATCTGTAGAGGAGCCTGGAGTCGGATCTAGCCATGGCTGGCAGAGGTTTCTAG
GGTGGGCCCCAGCCGTGGCGTGAACTGAGGATGACCCGGGGCAGCTGGCAGGAGAGAGCC
TTGGCCTGACCTGGCACAGAAAGGGCAGCTTCAGTCTCTGCAGTGTCCATTATCTGCTGT
TCCTTCGAGGGTTCCAGGCTGTGTGTGGGGCCCAAGCATGCCCCACCCACCCCTCCTGGG
CCCAGGCAGCACCTGGAGCCCACAGAGTCTGTGTGTAGCCAGGAAGCCCCGCTCAGGTAG
CCACCGCCGGGGCACTGGCTGCTCTGTCTTGGTCCTGTTAACCCTCCACCTCCTCTCTTG
GACTCCCTCCCCACCCCAACCACTCTTTCTTTCTCCTTTAACCCAATGGAGACTTTCTGA
TGCATCGTTTTCTTTGCTGTGCCAAAGCAGGTCAGAAGAGGGAGAGGAGGGGCTGGGGGT
GAGGGGCCAGGCCATGGCCAAGGGGCCAGCTGCCCCTCATTTATCACTCTGACCTTCACA
GGGACAGATCTGATTTATTTATTTTGGTTAAAAAAAAAAAAAAGGAACAGAAACAACTTT
GCATTGCATTGGCTTGACCCATAAACTAAGTTATATCCGTGAAAAAAAAAAAAAAAAAA

Restriction Sites: Please inquire

ACCN: NM_002541

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:	This TrueClone is provided through our Custom Cloning Process that includes sub-cloning into OriGene's pCMV6 vector and full sequencing to provide a non-variant match to the expected reference without frameshifts, and is delivered as lyophilized plasmid DNA.
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_002541.2, NP_002532.2
RefSeq Size:	4257 bp
RefSeq ORF:	3072 bp
Locus ID:	4967
UniProt ID:	Q02218
Cytogenetics:	7p13
Domains:	E1_dehydrog, transket_pyr
Protein Families:	Druggable Genome
Protein Pathways:	Citrate cycle (TCA cycle), Lysine degradation, Metabolic pathways, Tryptophan metabolism
Gene Summary:	This gene encodes one subunit of the 2-oxoglutarate dehydrogenase complex. This complex catalyzes the overall conversion of 2-oxoglutarate (alpha-ketoglutarate) to succinyl-CoA and CO(2) during the Krebs cycle. The protein is located in the mitochondrial matrix and uses thiamine pyrophosphate as a cofactor. A congenital deficiency in 2-oxoglutarate dehydrogenase activity is believed to lead to hypotonia, metabolic acidosis, and hyperlactatemia. Alternative splicing results in multiple transcript variants encoding distinct isoforms.[provided by RefSeq, Sep 2009] Transcript Variant: This variant (1) represents the longest transcript and encodes the longest isoform (1).