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 SC123700

OGDH (BC009580) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	OGDH (BC009580) Human Untagged Clone
Tag:	Tag Free
Symbol:	OGDH
Synonyms:	2-oxoglutarate dehydrogenase; AKGDH; E1k; H_DJ0691F11_gi16307008.sp_cds.1; OGDC; oxoglutarate (alpha-ketoglutarate) dehydrogenase (lip; oxoglutarate decarboxylase'; oxoglutarate dehydrogenase (lipoamide); oxoglutarate dehydrogenase (succinyl-transferring)
Mammalian Cell Selection:	None
Vector:	pCMV6-XL5
E. coli Selection:	Ampicillin (100 ug/mL)

Fully Sequenced ORF:

>OriGene sequence for BC009580 edited
CCGAGAGTTTGGAGCCCCGGAGTGGGGTGTCGGCGCCTCATTCGGGTGGAGCTGAGCCGG
AGACAGGCAGTTGTGAAAAACTTCAGGACAAAAATGTTTCATTTAAGGACTTGTGCTGCT
AAGTTGAGGCCATTGACGGCTTCCCAGACTGTTAAGACATTTTCACAAAACAGACCAGCA
GCAGCTAGGACATTTCAACAGATTCGGTGCTATTCTGCACCTGTTGCTGCTGAGCCCTTT
CTCAGTGGGACTAGTTCGAACTATGTGGAGGAGATGTACTGTGCTTGGCTGGAAAACCCC
AAAAGTGTACATAAGTCATGGGACATTTTTTTTCGCAACACGAATGCCGGAGCCCCACCG
GGCACTGCCTACCAGAGTCCCCTTCCCCTGAGCCGAGGCTCCCTGGCTGCTGTGGCCCAT
GCACAGTCCCTGGTAGAAGCACAGCCCAACGTGGACAAGCTCGTGGAGGACCACCTGGCA
GTGCAGTCGCTCATCAGGGCATATCAGATACGAGGGCACCATGTAGCACAGCTGGACCCC
CTGGGGATTTTGGATGCTGATCTGGACTCCTCCGTGCCCGCTGACATTATCTCATCCACA
GACAAACTTGGGTTCTATGGCCTGGATGAGTCTGACCTCGACAAGGTCTTCCACTTGCCC
ACCACCACTTTCATCGGGGGACAGGAATCAGCACTTCCTCTGCGGGAGATCATCCGTCGG
CTGGAGATGGCCTACTGCCAGCATATTGGGGTGGAGTTCATGTTCATCAATGACCTGGAG
CAGTGCCAGTGGATCCGGCAGAAGTTTGAGACCCCTGGGATCATGCAGTTCACAAATGAG
GAGAAACGGACCCTGCTGGCCAGGCTTGTGCGGTCCACCAGGTTTGAGGAGTTCCTACAG
CGGAAGTGGTCCTCTGAGAAGCGCTTTGGTCTAGAAGGCTGCGAGGTACTGATCCCTGCC
CTCAAGACCATCATTGACAAGTCTAGTGAGAATGGCGTGGACTACGTGATCATGGGCATG
CCACACAGAGGGCGGCTGAACGTGCTTGCAAATGTCATCAGGAAGGAGCTGGAACAGATC
TTCTGTCAATTCGATTCAAAGCTGGAGGCAGCTGATGAGGGCTCCGGAGATGTGAAGTAC
CACCTGGGCATGTATCACCGCAGGATCAATCGTGTCACCGACAGGAACATTACCTTGTCC
TTGGTGGCCAACCCTTCCCACCTTGAGGCCGCTGACCCCGTGGTGATGGGCAAGACCAAA
GCCGAACAGTTTTACTGTGGCGACACTGAAGGGAAAAAGGTAAGGCCCAGAGAGAGGCGT
GCAAGGCAGATCGTCAAGGCCCCATGTTCCAGCATGGAGTTCCGCTCACCAACATAACCC
AGAGCCCTGGGTGCATCTAGACTTTAAAAAAATATTTAAAGTCGGCCGGGCGCAGTGTCT
CACGCCTGTAATCCCAGCACTTTGGGAGGCCGAGGTGGGCAGATCACCTGAGTTCGGGAG
TTGGAGACCAGCCTGACCAACATGGAGAAACTCCATCTCTACTAAAAATACAAAATTAGC
TGGGCGTGGTGGCGCGCGCCTGTAATCCCAGCTACTCAGGAGGCTGAGGCAGGAGAATCG
CTTGAACCCGGGAGGTGGAGGTTGCAGTGAGCCGAGATTACGCCATTGCACTCCAGCCTG
GGCCAACAAGAGCGAAACTCTGTCTCAAAGAAAAAAATAAATAAATAAAAAATATATGTA
TATGCAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA

5' Read Nucleotide Sequence:

>OriGene 5' read for BC009580 unedited
NNCCAGACACATTTGTATACGACTCCTATAGGCGGCCCGCGAATTCGCCATTACGGCCGG
GGCCGAGAGTTTGGAGCCCCGGAGTGGGGTGTCGGCGCCTCATTCGGGTGGAGCTGAGCC
GGAGACAGGCAGTTGTGAAAAACTTCAGGACAAAAATGTTTCATTTAAAGACTTGTGCTG
CTAAGTTGAGGCCATTGACGGCTTCCCAGACTGTTAAGACATTTTCACAAAACAGACCAG
CAGCAGCTAGGACATTTCAACAGATTCGGTGCTATTCTGCACCTGTTGCTGCTGAGCCCT
TTCTCAGTGGGACTAGTTCGAACTATGTGGAGGAGATGTACTGTGCTTGGCTGGAAAACC
CCAAAAGTGTACATAAGTCATGGGACATTTTTTTTCGCAACACGAATGCCGGAGCCCCAC
CGGGCACTGCCTACCAGAGTCCCCTTCCCCTGAGCCGAGGCTCCCTGGCTGCTGTGGCCC
ATGCACAGTCCCTGGTAGAAGCACAGCCCAACGTGGACAAGCTCGTGGAGGACCACCTGG
CAGTGCAGTCGCTCATCAGGGCATATCAGATACGAGGGCACCATGTAGCACAGCTGGACC
CCCTGAGGATTTTGGATGCTGATCTGGACTCCTCCGTGCCCGCTGACATTATCTCATCCA
CAGACAAACTTGAGTTCTATGGCCTGGATGAGTCTGACCTCGACAGGTCTTCCACTTGCC
CACCACCACTTTCATCGGGGGACAGGAATCAGCACTTCCTCTGCGGNAGATCATCCGTCG
GCTGGAGATGGCCTACTGCCAGCATATTGAGGGTGGAGTTCATGTTNCATCATGACCCTN
AGCANTGCCCATTGGATCCGGCAGAAGTTTGAGACCCCTGGGATCATGCAGTTCACN

Restriction Sites: Please inquire

ACCN: BC009580

Insert Size: 1775 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).
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:	BC009580.1, AAH09580.1
RefSeq Size:	1775 bp
Locus ID:	4967
Cytogenetics:	7p13
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]