

Product datasheet for **RC200473**

GCDH (NM_000159) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	GCDH (NM_000159) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	GCDH
Synonyms:	ACAD5; GCD
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



[View online »](#)

ORF Nucleotide Sequence:

>RC200473 ORF sequence
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGGCCCTGAGAGCGTCTCCGTGCGGCTGCTGAGCCCGGACCCGGCCTGCACGTCCTTCGCACGTGGG
 TCTCGTCGGCGGCAGACCCGAGAAAGCGGGAGAACACAGAGCCAACTGGCTAAGTCCTCGCGTCCCGA
 GTTTGACTGGCAGGACCCGCTGGTGTGGAGGAGCAGCTGACCACAGATGAGATCCTCATCAGGGACACC
 TTCCGCACCTACTGCCAGGAGAGACTCATGCCTCGCATCCTGTTGGCCAATCGCAACGAAGTTTTTCATC
 GGGAGATCATTTCGGAGATGGGGGAGTTGGGTGTGCTGGGCCCCACCATCAAAGGATATGGCTGTGCTGG
 GGTTTCGTCTGTGGCCTATGGGCTCCTGGCCCCGAGAGCTGGAGCGGGTGGACAGTGGCTACAGGTCGGCG
 ATGAGTGTCCAGTCTCCCTCGTCATGCACCCTATCTATGCCTATGGCAGCGAGGAACAGCGGCAGAAGT
 ACCTGCCCCAGCTGGCCAAGGGGAGCTCCTGGGCTGCTTCGGGCTCACAGAGCCCAACAGCGGAAGTGA
 CCCCAGCAGCATGGAGACCAGAGCCCACTACAACCTCATCCAACAAGAGCTACACCCTCAATGGGACCAAG
 ACCTGGATCACGAACTCGCTATGGCCGATCTGTTTGTAGTGTGGGCTCGGTGTGAAGATGGCTGCATTC
 GGGGCTTCTCTGTGGAGAAGGGGATGCGGGGTCTCTCGGCCCCAGGATCCAGGGCAAGTTCCTCGTGC
 GCCTCAGCCACAGGCATGATCATGAGACGGTGTGGAGGTGCCAGAGGAGAATGTGCTCCCTGGTGCA
 TCCAGCCTGGGGGTCCCTTCGGCTGCCTGAACAACGCCCGGTACGGCATCGCGTGGGGCGTGCTTGGAG
 CTTCCGAGTTCTGCTTGCACACAGCCCGGCAGTACGCCCTCGACAGGATGCAGTTTGGTGTCCCACTGGC
 CAGGAACCAGCTGATTCAGAAGAAGCTGGCAGACATGCTCACTGAGATTACCCTGGGCTTCACGCCTGC
 CTGCAGCTCGGCCGCTTGAAGGACCAGGACAAGGCTGCCCCGAGATGGTTTCTCTGTGAAGAGGAATA
 ACTGTGGGAAAGCCCTGGACATCGCCCGCCAGGCCCCGAGACATGCTGGGGGGAATGGGATTTCTGACGA
 GTATCACGTGATCCGGCACGCCATGAACCTGGAGGCCGTGAACACCTACGAAGGTACACATGACATTAC
 GCCTGATCCTTGGGAGAGCTATCACGGGAATCCAGGCGTTCACGGCCAGCAAG

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>RC200473 protein sequence
 Red=Cloning site Green=Tags(s)

MALRGVSVRLLSRGPGLHVLRTWVSSAAQTEKGGRTQSQLAKSSRPEFDWQDPLVLEEQLTTDEILIRDT
 FRTYCQERLMPRILLANRNEVFHREIISEMGELGVLGPTIKGYGCAGVSSVAYGLLARELERVDSGYRSA
 MSVQSSLVMHPIYAYGSEEQKYLPLAKGELLGCFGLTEPNSSGDPSSMETRAHYNSSNKSYYTLNGTK
 TWITNSPMADLFVWARCEDGCIKRGFLLEKGMRLSAPRIQKFSLRASATGMIIMDGVVEPEENVLPGA
 SSLGGPFGLNNARYGIAWVGLGASEFCLHTARQYALDRMQFGVPLARNQLIQKKLADMLTEITLGLHAC
 LQLGRLKDQDKAAPMVSLKRNKCGKALDIARQARDMLGGNGISDEYHVRHAMNLEAVNTYEGTHDIH
 ALILGRAITGIQAFTASK

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms:

https://cdn.origene.com/chromatograms/mk6582_h04.zip

Restriction Sites:

Sgfl-Mlul

Domains: Acyl-CoA_dh, Acyl-CoA_dh_M, Acyl-CoA_dh_N

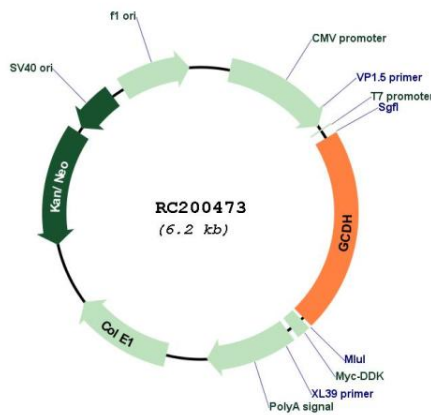
Protein Families: Druggable Genome

Protein Pathways: Fatty acid metabolism, Lysine degradation, Metabolic pathways, Tryptophan metabolism

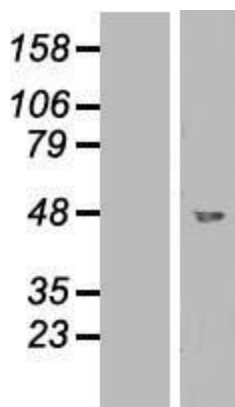
MW: 48.1 kDa

Gene Summary: The protein encoded by this gene belongs to the acyl-CoA dehydrogenase family. It catalyzes the oxidative decarboxylation of glutaryl-CoA to crotonyl-CoA and CO(2) in the degradative pathway of L-lysine, L-hydroxylysine, and L-tryptophan metabolism. It uses electron transfer flavoprotein as its electron acceptor. The enzyme exists in the mitochondrial matrix as a homotetramer of 45-kD subunits. Mutations in this gene result in the metabolic disorder glutaric aciduria type 1, which is also known as glutaric acidemia type I. Alternative splicing of this gene results in multiple transcript variants. A related pseudogene has been identified on chromosome 12. [provided by RefSeq, Mar 2013]

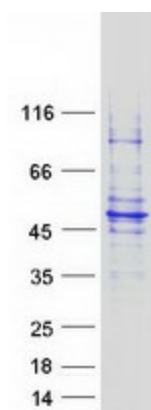
Product images:



Circular map for RC200473



Western blot validation of overexpression lysate (Cat# [LY424891]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC200473 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified GCDH protein (Cat# [TP300473]). The protein was produced from HEK293T cells transfected with GCDH cDNA clone (Cat# RC200473) using MegaTran 2.0 (Cat# [TT210002]).