

Product datasheet for **TP300473M**

GCDH (NM_000159) Human Recombinant Protein

Product data:

Product Type:	Recombinant Proteins
Description:	Recombinant protein of human glutaryl-Coenzyme A dehydrogenase (GCDH), nuclear gene encoding mitochondrial protein, transcript variant 1, 100 µg
Species:	Human
Expression Host:	HEK293T
Expression cDNA Clone or AA Sequence:	>RC200473 protein sequence Red=Cloning site Green=Tags(s)

MALRGVSVRLLSRGPGLHVLRTWVSSAAQTEKGGRTQSQLAKSSRPEFDWQDPLVLEEQLTTDEILIRDT
FRTYCQERLMPRILLANRNEVFHREIISEMGELGVLGPTIKGYGCAGVSSVAYGLLARELERVDSGYRSA
MSVQSSLVMHPIYAYGSEEQRQKYLPLQAKGELLGCFGLTEPNSGSDPSSMETRAHYNSSNKSYTLNGTK
TWITNSPMADLFVWARCEDGCIRGFLLEKGMRGLSAPRIQGKFSLRASATGMIIMDGVPEENVLPGA
SSLGGPFGCLNNARYGIAWVGLGASEFCLHTARQYALDRMQFGVPLARNQLIQKKLADMLTEITLGLHAC
LQLGRLKDQDKAAPMVSLKRNCGKALDIARQARDMLGGNGISDEYHVIRHAMNLEAVNTYEGTHDIH
ALILGRAITGIQAFTASK

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Tag:	C-Myc/DDK
Predicted MW:	43.4 kDa
Concentration:	>0.05 µg/µL as determined by microplate BCA method
Purity:	> 80% as determined by SDS-PAGE and Coomassie blue staining
Buffer:	25 mM Tris-HCl, 100 mM glycine, pH 7.3, 10% glycerol
Preparation:	Recombinant protein was captured through anti-DDK affinity column followed by conventional chromatography steps.
Note:	For testing in cell culture applications, please filter before use. Note that you may experience some loss of protein during the filtration process.
Storage:	Store at -80°C.
Stability:	Stable for 12 months from the date of receipt of the product under proper storage and handling conditions. Avoid repeated freeze-thaw cycles.



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RefSeq: [NP_000150](#)

Locus ID: 2639

UniProt ID: [Q92947](#), [A0A024R7F9](#)

RefSeq Size: 1897

Cytogenetics: 19p13.13

RefSeq ORF: 1314

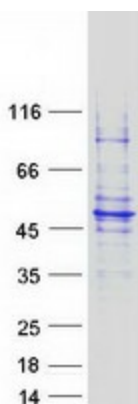
Synonyms: ACAD5; GCD

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 CO₂ 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]

Protein Families: Druggable Genome

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

Product images:



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]).