

Product datasheet for PH300473

GCDH (NM_000159) Human Mass Spec Standard

Product data:

Product Type:	Mass Spec Standards
Description:	GCDH MS Standard C13 and N15-labeled recombinant protein (NP_000150)
Species:	Human
Expression Host:	HEK293
Expression cDNA Clone or AA Sequence:	RC200473
Predicted MW:	48.1 kDa
Protein Sequence:	>RC200473 protein sequence Red=Cloning site Green=Tags(s)

MALRGVSVRLLSRGPGLHVLRTWVSSAAQTEKGGRTQSQLAKSSRPEFDWQDPLVLEEQLTTDEILIRDT
FRTYCQERLMPRILLANRNEVFHREIISEMGELGVLGPTIKGYGCAGVSSVAYGLLARELERVDSGYRSA
MSVQSSLVMHPIYAYGSEEQRQKYLPLAKGELLGCFGLTEPNSGSDPSSMETRAHYNSSNKSYYTLNGTK
TWITNSPMADLFVWARCEDGCIRGFLLKGMRLSAPRIQGFSLRASATGMIIMDGVEVPEENVLPGA
SSLGGPFGCLNNARYGIWVGLGASEFCLHTARQYALDRMQFVPLARNQLIQKKLADMLTEITLGLHAC
LQLGRLKDQDKAAPMVSLKRNCGKALDIARQARDMLGGNGISDEYHVIRHAMNLEAVNTYEGTHDIH
ALILGRAITGIQAF TASK

TRTRPLEQKLI SEEDLAANDILDYKDDDDKV

Tag:	C-Myc/DDK
Purity:	> 80% as determined by SDS-PAGE and Coomassie blue staining
Concentration:	>0.05 µg/µL as determined by microplate BCA method
Labeling Method:	Labeled with [U- ¹³ C ₆ , ¹⁵ N ₄]-L-Arginine and [U- ¹³ C ₆ , ¹⁵ N ₂]-L-Lysine
Buffer:	25 mM Tris-HCl, 100 mM glycine, pH 7.3
Storage:	Store at -80°C. Avoid repeated freeze-thaw cycles.
Stability:	Stable for 3 months from receipt of products under proper storage and handling conditions.
RefSeq:	<u>NP_000150</u>
RefSeq Size:	1897
RefSeq ORF:	1314
Synonyms:	ACAD5; GCD



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Locus ID: 2639

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

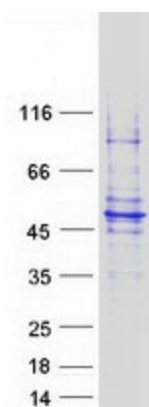
Cytogenetics: 19p13.13

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]

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]).