

## Product datasheet for **TP720971**

### GCDH (NM\_000159) Human Recombinant Protein

#### Product data:

Product Type:	Recombinant Proteins
Description:	Purified recombinant protein of Human glutaryl-CoA dehydrogenase (GCDH), nuclear gene encoding mitochondrial protein, transcript variant 1
Species:	Human
Expression Host:	E. coli
Expression cDNA Clone or AA Sequence:	Arg45-Lys438
Tag:	N-His
Predicted MW:	45 kDa
Purity:	>95% as determined by SDS-PAGE and Coomassie blue staining
Buffer:	Provided lyophilized from a 0.2 µm filtered solution of 20 mM Tris-HCl, 150 mM NaCl
Endotoxin:	Endotoxin level is < 0.1 ng/µg of protein (< 1 EU/µg)
Storage:	Store at -80°C.
Stability:	Stable for at least 3 months from date of receipt under proper storage and handling conditions.
RefSeq:	<a href="#">NP_000150</a>
Locus ID:	2639
UniProt ID:	<a href="#">Q92947</a> , <a href="#">A0A024R7F9</a>
RefSeq Size:	1897
Cytogenetics:	19p13.13
RefSeq ORF:	1314
Synonyms:	ACAD5; GCD



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**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