

## **Product information**

GCDH, 45-438aa

Human, His-tagged, Recombinant, E.coli

Cat. No. IBATGP0622

Full name: Glutaryl-CoA dehydrogenase NCBI Accession No.: NP\_000150

Synonyms: ACAD5, GCD

**Description**: Glutaryl-CoA dehydrogenase(GCDH) belongs to the acyl-CoA dehydrogenase family. GCDH catalyzes the oxidative decarboxylation of glutaryl-CoA to crotonyl-CoA and CO (2) in the degradative pathway of Llysine, L-hydroxylysine, and L-tryptophan metabolism. This Protein uses electron transfer flavoprotein as its electron acceptor. The enzyme exists in the mitochondrial matrix as a homotetramer of 45-kD subunits. Alternatively spliced transcript variants encoding different isoforms have been identified. Recombinant GCDH protein, fused to His-tag at N-terminus, was expressed in *E.coli* and purified by using conventional chromatography techniques.

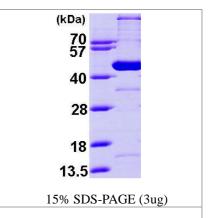
Form: Liquid. 20mM Tris-HCl buffer (pH8.0) containing 20% glycerol,

5mM DTT, 200mM NaCl

Molecular Weight: 45.8kDa (415aa), confirmed by MALDI-TOF

Purity: > 90% by SDS - PAGE

**Concentration:** 0.5 mg/ml (determined by Bradford assay)



## Sequences of amino acids:

MGSSHHHHHH SSGLVPRGSH MRPEFDWQDP LVLEEQLTTD EILIRDTFRT YCQERLMPRI LLANRNEVFH REIISEMGEL GVLGPTIKGY GCAGVSSVAY GLLARELERV DSGYRSAMSV QSSLVMHPIY AYGSEEQRQK YLPQLAKGEL LGCFGLTEPN SGSDPSSMET RAHYNSSNKS YTLNGTKTWI TNSPMADLFV VWARCEDGCI RGFLLEKGMR GLSAPRIQGK FSLRASATGM IIMDGVEVPE ENVLPGASSL GGPFGCLNNA RYGIAWGVLG ASEFCLHTAR QYALDRMQFG VPLARNQLIQ KKLADMLTEI TLGLHACLQL GRLKDQDKAA PEMVSLLKRN NCGKALDIAR QARDMLGGNG ISDEYHVIRH AMNLEAVNTY EGTHDIHALI LGRAITGIQA FTASK

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## **General references:**

Keyser B., et al. (2008) Hum. Mol. Genet. 17:3854-3863 Westover JB., et al. (2001) Biochemistry. 40(46):14106-14.

**Storage:** Can be stored at +4°C short term (1-2 weeks). For long term storage, aliquot and store at -20°C or -70°C. Avoid repeated freezing and thawing cycles.

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