

Recombinant human **GLUD1** protein

Catalog Number: ATGP2653

PRODUCT INFORMATION

Expression system

E.coli

Domain

54-558aa

UniProt No.

P00367

NCBI Accession No.

NP_005262

Alternative Names

Glutamate dehydrogenase 1, mitochondrial, GDH, GDH1, GLUD

PRODUCT SPECIFICATION

Molecular Weight

58.4 kDa (528aa)

Concentration

1mg/ml (determined by Bradford assay)

Formulation

Liquid in. 20mM Tris-HCl buffer (pH 8.0) containing 0.4M urea, 10% glycerol

Purity

> 80% by SDS-PAGE

Tag

His-Tag

Application

SDS-PAGE, Denatured

Storage Condition

Can be stored at +2C to +8C for 1 week. For long term storage, aliquot and store at -20C to -80C. Avoid repeated freezing and thawing cycles.

BACKGROUND

Description

Glutamate dehydrogenase 1, mitochondrial precursor, also known as GLuD1, belongs to the Glu/Leu/Phe/Val dehydrogenases family. GLuD1 has a central role in nitrogen metabolism in plants and animals. GLuD1 is found in all organisms and catalyzes the oxidative deamination of 1-glutamate to 2-oxoglutarate. Mutations in the gene encoding GLuD1 causes hyperinsulinism-hyperammonemia syndrome (HHS), which is an inherited condition characterized by high insulin and ammonia levels in the blood. GLuD1 may also be involved in learning and memory reactions by increasing the turnover of the excitatory neurotransmitter glutamate. Recombinant human

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GLuD1 protein, fused to His-tag at N-terminus, was expressed in E. coli.

Amino acid Sequence

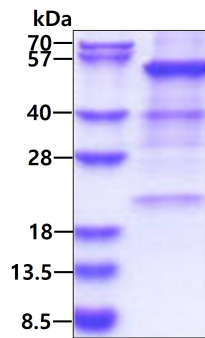
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RVRGILRIIK PCNHVLSLSF PIRRDDGSWE VIEGYRAQHS QHRTPCKGGI RYSTDVSVDE VKALASLMTY KCAVVDVPFG
GAKAGVKINP KNYTDNELEK ITRRFTMELA KKGFIGPGID VPAPDMSTGE REMSWIADTY ASTIGHYDIN AHACVTGKPI
SQGGIHGRIS ATGRGVFHGI ENFINEASYM SILGMTPGFG DKTFVVQFG NVGLHSMRYL HRFGAKCIAV GESDGSIWNP
DGIDPKELED FKLQHGSI LG FPKAKPYEGS ILEADCIL I PAASEKQLTK SNAPRVKAKI IAEGANGPTT PEADKIFLER
NIMVIPDLYL NAGGVTVS YF EWLKLNHVS YGRLTFKYER DSNYHLLMSV QESLERKFGK HGGTIPIVPT AEFQDRISGA
SEKDIVHSG L AYT MERSARQ IMRTAMKYNL GLDLR TAAYV NAIEKVFKVY NEAGVTFT

General References

Mastorodemos V., et al. (2009) *Biochem Cell Biol.* 87:505-516.
Tanizawa Y., et al. (2002) *Diabetes.* 51:712-717.

DATA

SDS-PAGE



3ug by SDS-PAGE under reducing condition and visualized by coomassie blue stain.