

## 32-2371: GLUD1 Recombinant Protein

**Alternative Name :** Glutamate Dehydrogenase 1, GLUD, GDH 1, EC 1.4.1.3, GDH, GDH1, Glutamate Dehydrogenase (NAD(P)+), Glutamate Dehydrogenase 1 Mitochondrial, EC 1.4.1, GLUD1.

### Description

Source : Escherichia Coli. GLUD1 Human Recombinant produced in E.coli is a single, non-glycosylated polypeptide chain containing 528 amino acids (54-558) and having a molecular mass of 58.4kDa. GLUD1 is fused to a 23 amino acid His-tag at N-terminus. Glutamate dehydrogenase 1, mitochondrial precursor (GLUD1) is a member of the Glu/Leu/Phe/Val dehydrogenases family. GLUD1 is a mitochondrial glutamate dehydrogenase, which converts L-glutamate into alpha-ketoglutarate. GLUD1 has a pivotal role in nitrogen metabolism in plants and animals. GLUD1 is observed in all organisms and catalyzes the oxidative deamination of 1-glutamate to 2-oxoglutarate. The GLUD1 enzyme has a vital role in regulating amino acid induced insulin secretion. GLUD1 gene mutations cause hyperinsulinism-hyperammonemia syndrome (HHS), which is an inherited condition characterized by high insulin and ammonia levels in the blood. GLUD1 enzyme is allosterically activated by ADP and inhibited by GTP and ATP.

### Product Info

**Amount :** 20 µg  
**Purification :** Greater than 80.0% as determined by SDS-PAGE.  
**Content :** The GLUD1 solution (1mg/ml) contains 20mM Tris-HCl buffer (pH 8.0), 0.4M Urea and 10% glycerol.  
**Storage condition :** Store at 4°C if entire vial will be used within 2-4 weeks. Store, frozen at -20°C for longer periods of time. For long term storage it is recommended to add a carrier protein (0.1% HSA or BSA). Avoid multiple freeze-thaw cycles.  
**Amino Acid :** MGSSHHHHHH SSGLVPRGSH MGSSEAVADR EDDPNFFKMV EGGFFDRGASI VEDKLVEDLR  
TRESEEQKRN RVRGILRIIK PCNHVLSLSF PIRRDDGSWE VIEGYRAQHS QHRTPCGGI  
RYSTDVSVDE VKALASLMTY KCAVVDVPPG GAKAGVKINP KNYTDNELEK ITRRFTMELA  
KKGFIGPGID VPAPDMSTGE REMSWIADTY ASTIGHYDIN AHACVTGKPI SQGGIHDRIS  
ATGRGVFHGI ENFINEASYM SILGMTPGFG DKTFVVQGFV NVGLHSMRYL HRFGAKCIAV  
GESDGSIWNP DGIDPKELED FKLQHGSILG FPKAKPYEGS ILEADCIL I PAASEKQLTK  
SNAPRVKAKI IAEGANGPTT PEADKIFLER NIMVIPDLYL NAGGVTVS YF EWLKLNHNVS  
YGRITFKYER DSNYHLLMSV QESLERKFGK HGGTIPIVPT AEFQDRISGA SEKDIVHSGL  
AYTMERSARQ IMRTAMKYNL GLDLRTAAYV NAIEKVFVY NEAGVTFT.

