

**GLUD1, 54-558aa, Human, His tag, E.coli**

**Cat.NO.: TP02263**

3th Edition

**Synonyms:**Glutamate dehydrogenase 1, mitochondrial , GDH, GDH1, GLUD

**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 GLUD1 protein, fused to His-tag at N-terminus, was expressed in E.coli.

**Form:**Liquid. In 20mM Tris-HCl buffer (pH 8.0) containing 0.4M Urea, 10% glycerol

**Molecular Weight:**58.4 kDa (528aa)

**Sequences:**

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MGSSHHHHHSSGLVPRGSHMGSSEAVADREDDPNFFKMVEGFFDRGASIVEDKLVEDLRTRESEEQKRNRVRG
ILRIIKPCNHVLSLSFPIRRDDGSWEVIEGYRAQHSQHRTPCGGIRYSTDVSVDEVKALASLMTYKCAVVDVPPFGG
AKAGVKINPKNYTDNELEKITRRFTMELAKKGFIPGIDVPAPDMSTGEREMSWIADTYASTIGHYDINAHACVTGKP
ISQGGIHGRISATGRGVFHGIENFINEASYMSILGMTPGFGDKTFVVQGFNGVGLHSMRYLHRFGAKCIAVGESDGS
IWNPDGIDPKELEDFKLQHGSI LGFPKAKPYEGSILEADC DILIPAASEKQLTKSNAPRVKAKIIAEGANGPTTPEADKI
FLERNIMVIPDLYLNAGGVTVSYFEWLKLNHVSYGRLTFKYERDSNYHLLMSVQESLERKFGKHGGTIPIVPTAEF
QDRISGASEKDIVHSGLAYTMERSARQIMRTAMKYNLGLDLR TAAYVNAIEKVFKVYNEAGVTFT
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**Purity:**> 95% by HPLC

**Concentration:**1mg/ml (determined by Bradford assay)

**Endotoxin Level:**<1.0 EU per 1 ug of protein (determined by LAL method)

**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.