

Full-Length

GLUD1 (Human) Recombinant Protein (P02)

Catalog # H00002746-P02

Size 50 ug

Specification

Product Description	Human GLUD1 full-length ORF (BAG52930.1, 1 a.a. - 515 a.a.) recombinant protein with GST-tag at N-terminal.
Sequence	MYRYLGPGTARRRPAAGAGIGRPAPLQRGGGRPRGRPQLLQDGGGLLSRRQHRGGQAGGGPE DPGERGAEAEPPGARHPADHQALQPCAESLLPQHSQHRTPCCKGGIRYSTDVSVDEVKALASLMT YKCAVVDVPFGGAKAGVKINPKNYTDNELEKITRRFTMELAKKGFIGPGIDVPAPDMSTGEREMS WIADTYASTIGHYDINAHACVTGKPISQGGIHGRISATGRGVFHGIENFINEASYMSILGMTPGFGDKT FVVQGFGNVGLHSMRYLHRFGAKCIAVGESDGSWNPDGIDPKELEDFKLQHGSLGFPKAKPYE GSILEADCILIPAASEKQLTKSNAPRVKAKIAEGANGPTTPEADKIFLERNIMVIPDLYLNAGGVTV SYFEWLKNLNHVSYGRLTFKYERDSNYHLLMSVQESLERKFGKHGGTIPVPTAEFQDRISGASEK DIVHSGLAYTVERSARQIMRTAMKYNLGLDLRTAAYVNAIEKVFKVYNEAGVTFT
Host	Wheat Germ (in vitro)
Theoretical MW (kDa)	82.4
Interspecies Antigen Sequence	Mouse (99); Rat (99)
Preparation Method	in vitro wheat germ expression system
Purification	Glutathione Sepharose 4 Fast Flow
Storage Buffer	50 mM Tris-HCl, 10 mM reduced Glutathione, pH=8.0 in the elution buffer.
Storage Instruction	Store at -80°C. Aliquot to avoid repeated freezing and thawing.
Note	Best use within three months from the date of receipt of this protein.

Applications

- Enzyme-linked Immunoabsorbent Assay
- Western Blot (Recombinant protein)

- Antibody Production
- Protein Array

Gene Info — GLUD1

Entrez GeneID [2746](#)

GeneBank Accession# [AK094782.1](#)

Protein Accession# [BAG52930.1](#)

Gene Name GLUD1

Gene Alias GDH, GDH1, GLUD, MGC132003

Gene Description glutamate dehydrogenase 1

Omim ID [138130 606762](#)

Gene Ontology [Hyperlink](#)

Gene Summary This gene encodes glutamate dehydrogenase protein; a mitochondrial matrix enzyme that catalyzes the oxidative deamination of glutamate to alpha-ketoglutarate and ammonia. This enzyme has an important role in regulating amino acid induced insulin secretion and activating mutations in this gene are a common cause of congenital hyperinsulinism. This enzyme is allosterically activated by ADP and inhibited by GTP and ATP. The related glutamate dehydrogenase 2 gene on the human X-chromosome originated from this gene via retrotransposition and encodes a soluble form of glutamate dehydrogenase. Multiple pseudogenes of this gene are present in humans

Other Designations OTTHUMP00000020018|glutamate dehydrogenase (NAD(P)+)

Pathway

- [Alanine](#)
- [Arginine and proline metabolism](#)
- [Biosynthesis of alkaloids derived from ornithine](#)
- [D-Glutamine and D-glutamate metabolism](#)
- [Metabolic pathways](#)
- [Nitrogen metabolism](#)

Disease

- [Alzheimer Disease](#)
- [Cognition](#)
- [Genetic Predisposition to Disease](#)
- [Hyperinsulinism](#)
- [Hypoglycemia](#)
- [Persistent Hyperinsulinemia Hypoglycemia of Infancy](#)
- [Schizophrenia](#)
- [Schizophrenic Psychology](#)
- [Weight Gain](#)