

Product datasheet for AR51473PU-N

OriGene Technologies, Inc.

9620 Medical Center Drive, Ste 200 Rockville, MD 20850, US Phone: +1-888-267-4436 https://www.origene.com techsupport@origene.com EU: info-de@origene.com CN: techsupport@origene.cn

Glutamate dehydrogenase 1 (54-558, His-tag) Human Protein

Product data:

Product Type: Recombinant Proteins

Description: Glutamate dehydrogenase 1 (54-558, His-tag) human recombinant protein, 0.5 mg

Species: Human E. coli **Expression Host:**

Expression cDNA Clone

MGSSHHHHHH SSGLVPRGSH MGSSEAVADR EDDPNFFKMV EGFFDRGASI VEDKLVEDLR or AA Sequence:

TRESEEQKRN RVRGILRIIK PCNHVLSLSF PIRRDDGSWE VIEGYRAQHS QHRTPCKGGI RYSTDVSVDE

VKALASLMTY KCAVVDVPFG GAKAGVKINP KNYTDNELEK ITRRFTMELA KKGFIGPGID VPAPDMSTGE REMSWIADTY ASTIGHYDIN AHACVTGKPI SOGGIHGRIS ATGRGVFHGI ENFINEASYM SILGMTPGFG DKTFVVQGFG NVGLHSMRYL HRFGAKCIAV GESDGSIWNP

DGIDPKELED FKLQHGSILG FPKAKPYEGS ILEADCDILI PAASEKQLTK SNAPRVKAKI IAEGANGPTT

PEADKIFLER NIMVIPDLYL NAGGVTVSYF EWLKNLNHVS YGRLTFKYER DSNYHLLMSV QESLERKFGK HGGTIPIVPT AEFQDRISGA SEKDIVHSGL AYTMERSARQ IMRTAMKYNL

GLDLRTAAYV NAIEKVFKVY NEAGVTFT

Tag: His-tag Predicted MW: 58.4 kDa Concentration: lot specific

>80% by SDS - PAGE **Purity:**

Buffer: Presentation State: This purified protein is available in a denatured form, making it less

suitable for functional studies. Denatured proteins are better suited for applications like

Western Blot (WB) or imaging assays.

State: Liquid purified protein

Buffer System: 20 mM Tris-HCl buffer (pH 8.0) containing 0.4M Urea, 10% glycerol

Preparation: Liquid purified protein

Protein Description: Recombinant human GLUD1 protein, fused to His-tag at N-terminus, was expressed in E.coli.

Storage: Store undiluted at 2-8°C for one week or (in aliquots) at -20°C to -80°C for longer. Avoid

repeated freezing and thawing.

Stability: Shelf life: one year from despatch.

RefSeq: NP 001305829

Locus ID: 2746



UniProt ID: <u>P00367</u>

Cytogenetics: 10q23.2

Synonyms: GLUD1, GLUD, GDH1

Summary: This gene encodes glutamate dehydrogenase, which is 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. It is allosterically activated by ADP and inhibited by GTP and ATP. Activating mutations in this gene are a common cause of congenital hyperinsulinism. Alternative splicing of this gene results in multiple transcript variants. 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. Related pseudogenes have been identified on

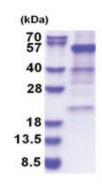
chromosomes 10, 18 and X. [provided by RefSeq, Jan 2016]

Protein Families: Druggable Genome

Protein Pathways: Alanine, aspartate and glutamate metabolism, Arginine and proline metabolism, D-Glutamine

and D-glutamate metabolism, Metabolic pathways, Nitrogen metabolism

Product images:



15% SDS-PAGE (3ug)