

## **Product datasheet for AR51462PU-N**

## OriGene Technologies, Inc.

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## GAD1 / GAD67 (1-224, His-tag) Human Protein

**Product data:** 

**Product Type:** Recombinant Proteins

**Description:** GAD1 / GAD67 (1-224, His-tag) human recombinant protein, 0.25 mg

Species: Human
Expression Host: E. coli

**Expression cDNA Clone** MGSSHHHHHH SSGLVPRGSH MGSMASSTPS SSATSSNAGA DPNTTNLRPT TYDTWCGVAH

or AA Sequence: GCTRKLGLKI CGFLQRTNSL EEKSRLVSAF KERQSSKNLL SCENSDRDAR FRRTETDFSN LFARDLLPAK

NGEEQTVQFL LEVVDILLNY VRKTFDRSTK VLDFHHPHQL LEGMEGFNLE LSDHPESLEQ ILVDCRDTLK YGVRTGHPRF FNQLSTGLDI IGLAGEWLTS TANTNMPSDM RECWLLR

Tag: His-tag
Predicted MW: 27.7 kDa
Concentration: lot specific

Purity: >85% by SDS - PAGE

**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 10% glycerol, 0.4M Urea

**Preparation:** Liquid purified protein

Protein Description: Recombinant human GAD1 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 000808

**Locus ID:** 2571

 UniProt ID:
 Q99259

 Cytogenetics:
 2q31.1

**Synonyms:** Glutamate decarboxylase 1, GAD-67





**Summary:** 

This gene encodes one of several forms of glutamic acid decarboxylase, identified as a major autoantigen in insulin-dependent diabetes. The enzyme encoded is responsible for catalyzing the production of gamma-aminobutyric acid from L-glutamic acid. A pathogenic role for this enzyme has been identified in the human pancreas since it has been identified as an autoantigen and an autoreactive T cell target in insulin-dependent diabetes. This gene may also play a role in the stiff man syndrome. Deficiency in this enzyme has been shown to lead to pyridoxine dependency with seizures. Alternative splicing of this gene results in two products, the predominant 67-kD form and a less-frequent 25-kD form. [provided by RefSeq, Jul 2008]

**Protein Families:** 

Druggable Genome

**Protein Pathways:** 

Alanine, aspartate and glutamate metabolism, beta-Alanine metabolism, Butanoate metabolism, Metabolic pathways, Taurine and hypotaurine metabolism, Type I diabetes mellitus

## **Product images:**

