

Product datasheet for **AR51462PU-S**

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

Product data:

Product Type:	Recombinant Proteins
Description:	GAD1 / GAD67 (1-224, His-tag) human recombinant protein, 50 µg
Species:	Human
Expression Host:	E. coli
Expression cDNA Clone or AA Sequence:	MGSSHHHHHH SSGLVPRGSH MGSMASTPS SSATSSNAGA DPNTTNLRPT TYDTWCGVAH GCTRKLGLKI CGFLQRTNSL EEKSRLVSAF KERQSSKNLL SCENSDRDAR FRRTETDFSN LFARDLLPAK NGEEQTVQFL LEVDILLNY 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 , A0A0S2Z3V5 , Q8IYA8
Cytogenetics:	2q31.1
Synonyms:	Glutamate decarboxylase 1, GAD-67



[View online »](#)

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: