

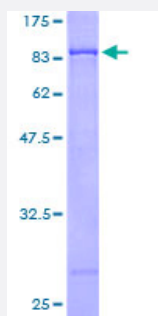
Full-Length

GAD1 (Human) Recombinant Protein (P02)

Catalog # H00002571-P02

Size 25 ug, 10 ug

Applications



Specification

Product Description

Human GAD1 full-length ORF (AAH37780, 1 a.a. - 594 a.a.) recombinant protein with GST-tag at N-terminal.

Sequence

MASSTPSSSATSSNAGADPNTTNLRPTTYDTWCGVAHGCTRKLGKICGFLQRTNSLEEKSRLLVS
AFKERQSSKNLLSCENS DRDARFRRTETDFS NLFARDLLPAKNGEEQTVQFLLEVVDILLNYVRK
TFDRSTKVLDFHHPHQLLEGMEGFNLELSDHPESLEQILVDCRDTLKYGVRTGHPRFFNQLSTGL
DIIGLAGEWL TSTANTNMFTYEIAPVFVLMEQITLKKMREIVGWSSKDGDGIFSPGGAISNMYSIMAA
RYKYFPEVKTGMAAVPKLVLTSEQSRYSIKKAGAALGF GTDNVILK CNERGEIIPADFEAKILEA
KQKGYVPFYVNATAGTTVYGAFDPIQEIADICEKYNLWLHVDAAWGGGLMSRKHRHKLNGIERAN
SVTWNPHKMMGVLLQCSAILVKEKGILQGCNQMCAGYLFQPDQYDVSYDTGDKAIQCGRHVDIF
KFWLMWKAKGTVGFENQINKCLELAEYLAKIKNREEFEMVFNGEPEHTNVCFWYPQSLRGVPD
SPQRREKLHKVAPKIKALMMESGTTMVGYPQGDKANFFRMVISNPAATQSDIDFLIEEIERLGQD
L

Host

Wheat Germ (in vitro)

Theoretical MW (kDa)

91.08

Interspecies Antigen Sequence

Mouse (97); Rat (97)

Preparation Method

[in vitro wheat germ expression system](#)

Purification

Glutathione Sepharose 4 Fast Flow

Quality Control Testing	12.5% SDS-PAGE Stained with Coomassie Blue.
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 — GAD1

Entrez GeneID	2571
GeneBank Accession#	BC037780
Protein Accession#	AAH37780
Gene Name	GAD1
Gene Alias	FLJ45882, GAD, SCP
Gene Description	glutamate decarboxylase 1 (brain, 67kDa)
Omim ID	603513 605363
Gene Ontology	Hyperlink

Gene 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]
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Other Designations

OTTHUMP00000041055|glutamate decarboxylase 1|glutamate decarboxylase 1 (brain, 67kD)

Pathway

- [Alanine](#)
- [beta-Alanine metabolism](#)
- [Butanoate metabolism](#)
- [Metabolic pathways](#)
- [Taurine and hypotaurine metabolism](#)
- [Type I diabetes mellitus](#)

Disease

- [Alcoholism](#)
- [Anxiety Disorders](#)
- [Autistic Disorder](#)
- [Bipolar Disorder](#)
- [Cleft Lip](#)
- [Cleft Palate](#)
- [Cognition](#)
- [Depressive Disorder](#)
- [Disease Models](#)
- [Genetic Predisposition to Disease](#)
- [Hypercholesterolemia](#)
- [Kidney Failure](#)
- [Mental Disorders](#)
- [Neuropsychological Tests](#)

- [Neurotic Disorders](#)
- [Psychiatric Status Rating Scales](#)
- [Schizophrenia](#)
- [Schizophrenic Psychology](#)
- [Sleep Disorders](#)
- [Weight Gain](#)