Recombinant Human GAD1 Protein, Myc/DDK-tagged, C13 and N15-labeled

Cat. No. GAD1-2992H **Lot. No.** (See product label)

SPECIFICATION

Product Overview	GAD1 MS Standard C13 and N15-labeled recombinant protein (NP_000808) with a C-terminal MYC/DDK tag, was expressed in HEK293 cells.
Species	Human
Source	HEK293
Description	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.
Molecular Mass	66.9 kDa
AA Sequence	MASSTPSSSATSSNAGADPNTTNLRPTTYDTWCGVAHGCTRKLGLKICGFLQRTNS LEEKSRLVSAFKERQSSKNLLSCENSDRDARFRRTETDFSNLFARDLLPAKNGEEQ TVQFLLEVVDILLNYVRKTFDRSTKVLDFHHPHQLLEGMEGFNLELSDHPESLEQILV DCRDTLKYGVRTGHPRFFNQLSTGLDIIGLAGEWLTSTANTNMFTYEIAPVFVLMEQI

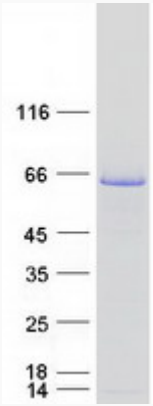
Tel: 1-631-559-9269 1-516-512-3133
Email: info@creative-biomart.com Fax: 1-631-938-8127
45-1 Ramsey Road, Shirley, NY 11967, USA

	TLKKMREIVGWSSKDGDGIFSPGGAISNMYSIMAARYKYFPEVKTKGMAAVPKLVLF TSEQSRYSIKKAGAALGFGTDNVILIKCNERGEIIPADFEAKILEAKQKGYVPFYVNAT AGTTVYGAFDPIQEIADICEKYNLWLHVDAAWGGGLLMSRKHRHKLNGIERANSVT WNPHKMMGVLLQCSAILVKEKGILQGCNQMCAGYLFQPDKQYDVSYDTGDKAIQC GRHVDIFKFWLMWKAKGTVGFENQINKCLELAEYLYAKIKNREEFEMVFNGEPEHT NVCFWYIPQSLRGVPDSPQRREKLHKVAPKIKALMMESGTTMVGYQPQGDKANFF RMVISNPAATQSDIDFLIEEIERLGQDLTRTRPLEQKLISEEDLAANDILDYKDDDDKV
Purity	> 80% as determined by SDS-PAGE and Coomassie blue staining
Stability	Stable for 3 months from receipt of products under proper storage and handling conditions.
Storage	Store at -80 centigrade. Avoid repeated freeze-thaw cycles.
Concentration	50 μg/mL as determined by BCA
Storage Buffer	100 mM glycine, 25 mM Tris-HCl, pH 7.3.

GENE INFORMATION

Gene Name	GAD1 glutamate decarboxylase 1 [Homo sapiens (human)]
Official Symbol	GAD1
Synonyms	GAD1; glutamate decarboxylase 1 (brain, 67kDa); GAD, glutamate decarboxylase 1 (brain, 67kD); glutamate decarboxylase 1; GAD-67; 67 kDa glutamic acid decarboxylase; glutamate decarboxylase 67 kDa isoform; GAD; SCP; CPSQ1; FLJ45882;
Gene ID	2571

Tel: 1-631-559-9269 1-516-512-3133
Email: info@creative-biomart.com Fax: 1-631-938-8127
45-1 Ramsey Road, Shirley, NY 11967, USA

mRNA Refseq	NM_000817
Protein Refseq	NP_000808
MIM	605363
UniProt ID	Q99259
SDS-PAGE	

Tel: 1-631-559-9269 1-516-512-3133
Email: info@creative-biomart.com Fax: 1-631-938-8127
45-1 Ramsey Road, Shirley, NY 11967, USA