

## Recombinant Human GAD2 Protein, His-tagged

Cat. No. GAD2-9169H Lot. No. (See product label)

### SPECIFICATION

<b>Product Overview</b>	Recombinant human GAD2 protein with a His-tag was expressed in E. coli
<b>Species</b>	Human
<b>Source</b>	E.coli
<b>ProteinLength</b>	1-585 aa
<b>Description</b>	<p>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 autoantibody and an autoreactive T cell target in insulin-dependent diabetes. This gene may also play a role in the stiff man syndrome. Alternative splicing results in multiple transcript variants that encode the same protein.</p>
<b>Molecular Mass</b>	The protein has a calculated MW of 67.5 kDa.
<b>AA Sequence</b>	<p>MGSSHHHHHHSSGLVPRGSHMASPGSGFWSFGSEDGSGDSENPGTARAWCQVA            QKFTGGIGNKLCALLYGDAEKPAESGGSQPPRAAARKAACACDQKPCSCSKVDVN            YAFLHATDLLPACDGERPTLAFLQDVMNILLQYVVKSFDRSTKVIDFHYPNELLQEYN            WELADQPQNLEEILMHCQTTLKYAIKTGHPRYFNQLSTGLDMVGLAADWLTSTANT            NMFTYEIAPVFLLEYVTLKKMREIIGWPGSGDGIFSPGGAISNMYAMMIARFKMFP            EVKEKGMAALPRLIAFTSEHSHFSLKKGAAALGIGTDSVILIKCDERGMIPSDLERRI</p>

 Tel: 1-631-559-9269 1-516-512-3133

 Email: [info@creative-biomart.com](mailto:info@creative-biomart.com)  Fax: 1-631-938-8127

 45-1 Ramsey Road, Shirley, NY 11967, USA



LEAKQKGFVPFLVSATAGTTVYGAFDPLLAVADICKKYKIWMHVDAAWGGGLLSMR  
 KHKWKLSGVERANSVTWNPBKMMGVPLQCSALLVREEGLMQNCNQMHASYLFFQ  
 DKHYDLSYDTGDKALQCGRHVDVFKLWLMWRAKGGTGFEAHVDKCLELAEYLYNII  
 KNREGYEMVFDGKPKQHTNVCFWYIPPSLRTLEDNEERMSRLSKVAPVIKARMMMEY  
 GTTMVSYQPLGDKVNFRRMVISNPAATHQDIDFLIEEIERLGQDL

<b>Endotoxin</b>	<1 EU/μg
<b>Purity</b>	>90%
<b>Storage</b>	Store it under sterile conditions at -20 to -80 centigrade. It is recommended that the protein be aliquoted for optimal storage. Avoid repeated freeze-thaw cycles.
<b>Storage Buffer</b>	Lyophilized from sterile PBS, pH 8.0, 5% trehalose, 5% mannitol.

## GENE INFORMATION

<b>Gene Name</b>	GAD2 glutamate decarboxylase 2 (pancreatic islets and brain, 65kDa) [ Homo sapiens (human) ]
<b>Official Symbol</b>	GAD2
<b>Synonyms</b>	GAD2; glutamate decarboxylase 2 (pancreatic islets and brain, 65kDa); glutamate decarboxylase 2 (pancreatic islets and brain, 65kD); glutamate decarboxylase 2; GAD65; GAD-65; 65 kDa glutamic acid decarboxylase; Glutamate decarboxylase-2 (pancreas); glutamate decarboxylase 65 kDa isoform; MGC161605; MGC161607;
<b>Gene ID</b>	2572
<b>mRNA Refseq</b>	NM_000818



<b>Protein Refseq</b>	<a href="#">NP_000809</a>
<b>MIM</b>	<a href="#">138275</a>
<b>UniProt ID</b>	<a href="#">Q05329</a>

 Tel: 1-631-559-9269 1-516-512-3133

 Email: [info@creative-biomart.com](mailto:info@creative-biomart.com)  Fax: 1-631-938-8127

 45-1 Ramsey Road, Shirley, NY 11967, USA