

Recombinant Human GAD2 Protein, His-tagged

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

SPECIFICATION

Product Overview	Recombinant human GAD2 protein with a His-tag was expressed in E. coli
Species	Human
Source	E.coli
ProteinLength	1-585 aa
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 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.
Molecular Mass	The protein has a calculated MW of 67.5 kDa.
AA Sequence	MGSSHHHHHHSSGLVPRGSHMASPGSGFWSFGSEDGSGDSENPGTARAWCQVA QKFTGGIGNKLCALLYGDAEKPAESGGSQPPRAAARKAACACDQKPCSCSKVDVN YAFLHATDLLPACDGERPTLAFLQDVMNILLQYVVKSFDRSTKVIDFHYPNELLQEYN WELADQPQNLEEILMHCQTTLKYAIKTGHPRYFNQLSTGLDMVGLAADWLTSTANT NMFTYEIAPVFLLEYVTLKKMREIIGWPGSGDGIFSPGGAISNMYAMMIARFKMFP EVKEKGMAALPRLIAFTSEHSHFSLKKGAAALGIGTDSVILIKCDERGMIPSDLERRI

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LEAKQKGFVPFLVSATAGTTVYGAFDPLLAVADICKKYKIWMHVDAAWGGGLLMSR
KHKWKLSGVERANSVTWNPHKMMGVPLQCSALLVREEGLMQNCNQMHASYLFQQ
DKHYDLSYDTGDKALQCGRHVDVFKLWLMWRAKGGTGFVAHVDCLELAEYLYNII
KNREGYEMVFDGKQPQHTNVCFWYIPPSLRTLEDNEERMSRLSKVAPVIKARMMMEY
GTTMVSYQPLGDKVNFFRMVISNPAATHQDIDFLIEEIERLGQDL

Endotoxin <1 EU/μg

Purity >90%

Storage 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.

Storage Buffer Lyophilized from sterile PBS, pH 8.0, 5% trehalose, 5% mannitol.

GENE INFORMATION

Gene Name GAD2 glutamate decarboxylase 2 (pancreatic islets and brain, 65kDa) [Homo sapiens (human)]

Official Symbol GAD2

Synonyms 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;

Gene ID 2572

mRNA Refseq NM_000818

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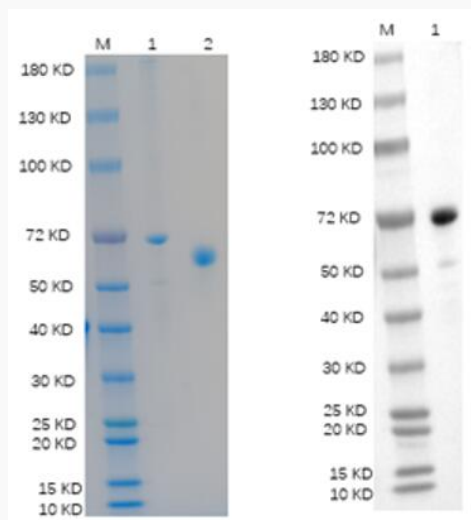
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Protein Refseq NP_000809

MIM 138275

UniProt ID Q05329

SDS-PAGE:



Reducing 12% SDS-PAGE and WB analysis profile of purified GAD2

1. GAD2
2. BSA

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