

GAD65 / GAD2 / GAD-2 recombinant protein

Human GAD65 / GAD2 / GAD-2 Protein (GST Tag)

CATALOG # AAA173504	HOST Baculovirus-Insect Cells
-------------------------------	---

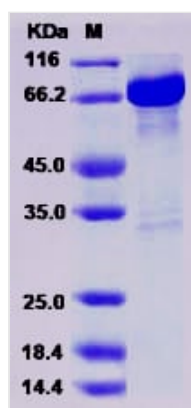
PRODUCT SYNONYMS

GAD65 / GAD2 / GAD-2; Human GAD65 / GAD2 / GAD-2 Protein (GST Tag); GAD65; GAD65 / GAD2 / GAD-2 recombinant protein

PRODUCT SPECIFICATIONS

Host	Baculovirus-Insect Cells
Purity/Purification	> 90 % as determined by reducing SDS-PAGE.
Form/Format	Lyophilized from sterile 200 Tirs, 150 mM NaCl, pH 8.0, 10 % glycerol, 1 mM GSH, 5%Trehalose, 5% Mannitol, 0.01% Tween-80
Sequence Positions	Met 1-Leu 585
Species	Human
Tag	N-GST
Endotoxin	< 1.0 EU per ?g as determined by the LAL method.
Reconstitution	We recommend that the vial be centrifuged to opening to bring the contents to the bottom. Do not mix by vortex. It is recommended that sterile water(80ul) be added to the vial to prepare a stock solution of 0.25mg/mL. Concentration is measured by UV-Vis.
Preparation and Storage	Lyophilized proteins are stable for up to 12 months when stored at -20 to -80°C. Reconstituted protein solution can be stored at 4-8°C for 2-7 days. Aliquots of reconstituted samples are stable at < -20°C for 3 months.

IMAGES



SDS-PAGE

ADDITIONAL INFORMATION

Related Product Information for GAD65 / GAD2 / GAD-2 recombinant protein	Glutamate decarboxylase 2, also known as glutamate decarboxylase 65 kDa isoform, 65 kDa glutamic acid decarboxylase, GAD2 and GAD65, is a member of the group II decarboxylase family. GAD2 is identified as a major autoantigen in insulin-dependent diabetes. GAD2 is responsible for catalyzing the production of gamma-aminobutyric acid from Lglutamic 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. GAD2 may also play a role in the stiff man syndrome. GAD2 is implicated in the formation of the gamma-aminobutyric acid (GABA), a neurotransmitter involved in the regulation of food intake. GABA is synthesized in brain by two isoforms of glutamic acid decarboxylase (Gad), GAD1 and GAD2. GAD1 provides most of the GABA in brain, but GAD2 can be rapidly activated in times of high GABA demand. Mice lacking GAD2 are viable whereas deletion of GAD1 is lethal. Deletion of GAD2 increased ethanol palatability and intake and slightly reduced the severity of ethanol-induced withdrawal.
--	--

NCBI AND UNIPROT INFORMATION

NCBI GI #	4503875
NCBI GeneID	2572
NCBI Accession #	NP_000809.1
NCBI GenBank Nucleotide #	NM_000818.2
UniProt Accession #	Q05329; Q9UD87
Molecular Weight	Mol_Mass: 92.6 kDa
NCBI Official Full Name	glutamate decarboxylase 2
NCBI Official Synonym Full Names	glutamate decarboxylase 2
NCBI Official Symbol	GAD2
NCBI Official Synonym Symbols	GAD65
NCBI Protein Information	glutamate decarboxylase 2
UniProt Protein Name	Glutamate decarboxylase 2
UniProt Gene Name	GAD2
UniProt Synonym Gene Names	GAD65; GAD-65

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.