

GAD65 recombinant protein

Recombinant Human GAD65 protein

CATALOG #
AAA18882

HOST
E Coli

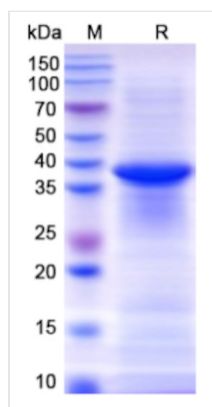
PRODUCT SYNONYMS

GAD65; Recombinant Human GAD65 protein; Glutamate decarboxylase 2; 65kDa glutamic acid decarboxylase; GAD-65; Glutamate decarboxylase 65kDa isoform; GAD65 recombinant protein

PRODUCT SPECIFICATIONS

Host	E Coli
Purity/Purification	>90% as determined by SDS-PAGE
Form/Format	Lyophilized from PBS pH 7.4, 0.02% NLS, 4% Trehalose, 1% Mannitol, 1mM EDTA.
Species	Homo sapiens (Human)
Protein Construction	A DNA sequence encoding the human GAD65 (Gln152-Asp496) was fused with His tag
Reconstitution	Reconstitute in sterile water for a stock solution.
Preparation and Storage	Store at 2 to 8°C for one week Store at -20 to -80°C for twelve months from the date of receipt. Use a manual defrost freezer and avoid repeated freeze thaw cycles.

IMAGES



SDS-PAGE

ADDITIONAL INFORMATION

Related Product Information for GAD65 recombinant protein	Glutamate decarboxylase 2, also known as glutamate decarboxylase 65kDa isoform, 65kDa 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 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. 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.
Product Categories/Family for GAD65 recombinant protein	Protein

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	Predicted Molecular Mass: 41.11 kDa
NCBI Official Full Name	glutamate decarboxylase 2
NCBI Official Synonym Full Names	glutamate decarboxylase 2 (pancreatic islets and brain, 65kDa)
NCBI Official Symbol	GAD2
NCBI Official Synonym Symbols	GAD65
NCBI Protein Information	glutamate decarboxylase 2; GAD-65; 65 kDa glutamic acid decarboxylase; Glutamate decarboxylase-2 (pancreas); glutamate decarboxylase 65 kDa isoform
UniProt Protein Name	Glutamate decarboxylase 2
UniProt Gene Name	GAD2
UniProt Synonym Gene Names	GAD65; GAD-65
UniProt Entry Name	DCE2_HUMAN

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.