

## Product datasheet for **TP323464M**

### **GAD65 (GAD2) (NM\_000818) Human Recombinant Protein**

#### Product data:

**Product Type:** Recombinant Proteins

**Description:** Recombinant protein of human glutamate decarboxylase 2 (pancreatic islets and brain, 65kDa) (GAD2), transcript variant 1, 100 µg

**Species:** Human

**Expression Host:** HEK293T

**Expression cDNA** >RC223464 protein sequence

**Clone or AA** Red=Cloning site Green=Tags(s)

**Sequence:**

MASPGSGFWSFGSEDGSGDSENPGTARAWCQVAQKFTGGIGNKLCALLYGDAEKPAESGGSQPPRAAARK  
AACACDQKPCSCSKVDVNYAFLHATDLLPACDGERPTLAFLQDVMNILLQYVVKSFDRSTKVIDFHYPNE  
LLQEYNWELADQPQNLEEILMHCQTTLKYAIKTHPRYFNQLSTGLDMVGLAADWLTSTANTNMFTYEIA  
PVFVLLLEYVTLKMKREIIGWPGGSGDGIFSPGGAISNMYAMMIARFKMFPEVKEKGMALPRLIAFTSEH  
SHFSLKKGAAALGIGTDSVILIKCDERGMIPSDLERRILEAKQKGFVPLVSATAGTTVYGAFDPLLAV  
ADICKKYKIWMHVDAAWGGGLLSRKHKWKLSGVERANSVTWNPBKMMGVPLQCSALLVREEGLMQNCNQ  
MHASYLFQQDKHYDLSYDTGDKALQCGRHVDVFKLWLMWRAKGTGFEAHVDKCLELAELYLNIIKNREG  
YEMVFDGKPKQHTNVCFWYIPPSLRTLEDNEERMSRLSKVAPVIKARMMMEYGTMMVSYQPLGDKVNFRRMV  
ISNPAATHQDIDFLIEEIERLGQDL

SGPTRTRPLEQKLISEEDLAANDILDYKDDDDKV

**Tag:** C-Myc/DDK

**Predicted MW:** 65.2 kDa

**Concentration:** >0.05 µg/µL as determined by microplate BCA method

**Purity:** > 80% as determined by SDS-PAGE and Coomassie blue staining

**Buffer:** 25 mM Tris-HCl, 100 mM glycine, pH 7.3, 10% glycerol

**Preparation:** Recombinant protein was captured through anti-DDK affinity column followed by conventional chromatography steps.

**Note:** For testing in cell culture applications, please filter before use. Note that you may experience some loss of protein during the filtration process.

**Storage:** Store at -80°C.



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**Stability:** Stable for 12 months from the date of receipt of the product under proper storage and handling conditions. Avoid repeated freeze-thaw cycles.

**RefSeq:** [NP\\_000809](#)

**Locus ID:** 2572

**UniProt ID:** [Q05329](#), [Q5VZ30](#)

**RefSeq Size:** 2824

**Cytogenetics:** 10p12.1

**RefSeq ORF:** 1755

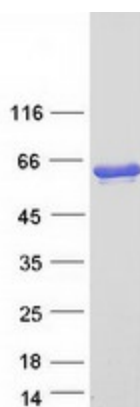
**Synonyms:** GAD65

**Summary:** 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. [provided by RefSeq, Oct 2008]

**Protein Families:** Druggable Genome

**Protein Pathways:** Alanine, aspartate and glutamate metabolism, beta-Alanine metabolism, Butanoate metabolism, Metabolic pathways, Taurine and hypotaurine metabolism, Type I diabetes mellitus

### Product images:



Coomassie blue staining of purified GAD2 protein (Cat# [TP323464]). The protein was produced from HEK293T cells transfected with GAD2 cDNA clone (Cat# [RC223464]) using MegaTran 2.0 (Cat# [TT210002]).