

# **Product datasheet for TP323464L**

#### OriGene Technologies, Inc.

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### 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, 1 mg

Species: Human
Expression Host: HEK293T

**Expression cDNA** >RC223464 protein sequence **Clone or AA** Red=Cloning site Green=Tags(s)

Clone or AA Sequence:

MASPGSGFWSFGSEDGSGDSENPGTARAWCQVAQKFTGGIGNKLCALLYGDAEKPAESGGSQPPRAAARK AACACDQKPCSCSKVDVNYAFLHATDLLPACDGERPTLAFLQDVMNILLQYVVKSFDRSTKVIDFHYPNE LLQEYNWELADQPQNLEEILMHCQTTLKYAIKTGHPRYFNQLSTGLDMVGLAADWLTSTANTNMFTYEIA PVFVLLEYVTLKKMREIIGWPGGSGDGIFSPGGAISNMYAMMIARFKMFPEVKEKGMAALPRLIAFTSEH SHFSLKKGAAALGIGTDSVILIKCDERGKMIPSDLERRILEAKQKGFVPFLVSATAGTTVYGAFDPLLAV

ADICKKYKIWMHVDAAWGGGLLMSRKHKWKLSGVERANSVTWNPHKMMGVPLQCSALLVREEGLMQNCNQ MHASYLFQQDKHYDLSYDTGDKALQCGRHVDVFKLWLMWRAKGTTGFEAHVDKCLELAEYLYNIIKNREG YEMVFDGKPQHTNVCFWYIPPSLRTLEDNEERMSRLSKVAPVIKARMMEYGTTMVSYQPLGDKVNFFRMV

ISNPAATHQDIDFLIEEIERLGQDL

**SGPTRTRPL**EQKLISEEDLAANDILDYKDDDDK**V** 

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.





#### GAD65 (GAD2) (NM\_000818) Human Recombinant Protein - TP323464L

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: <u>Q05329</u>, <u>Q5VZ30</u>

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

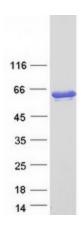
protein. [provided by RefSeq, Oct 2008]

**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]).