

## Product datasheet for **TP307226M**

### **GAD67 (GAD1) (NM\_000817) Human Recombinant Protein**

#### Product data:

**Product Type:** Recombinant Proteins  
**Description:** Recombinant protein of human glutamate decarboxylase 1 (brain, 67kDa) (GAD1), transcript variant GAD67, 100 µg

**Species:** Human

**Expression Host:** HEK293T

**Expression cDNA Clone or AA Sequence:** >RC207226 protein sequence  
**Red**=Cloning site **Green**=Tags(s)

MASSTPSSSATSSNAGADPNTTNLRPTYDTWCGVAHGCTRKLGLKICGFLQRTNSLEEKSRLLVSAFKER  
QSSKNLLSCENS DRDARFRRTETDFSNLFARDLLPAKNGEEQTVQFLLEVVDILLNVRKTFDRSTKVLD  
FHHPHQLLLEGMEGFNLELSDHPESLEQILVDCRDTLKYGVRTGHPRFFNQLSTGLDIIGLAGEWLTSTAN  
TNMFTYEIAPVFLMEQITLKKMREIVGWSSKDGDFSPGGAISNMYSIMAARYKYFPEVKTGMAAVP  
KLVLTSEQSRYSIKKAGAALFGTDNVILIKCNERGEIIPADFEAKILEAKQKGYVPFVYNATAGTTVY  
GAFDPQIEIADICEKYNLWLHVDAAWGGGLLMSRKHHRKLNKNGIERANSVTWNPHKMMGVLLQCSAILVKE  
KGILQGCNQMCAGYLFQPKQYDVSYDTGDKAIQCGRHVDIFKFWLMWKAKGTGVGFENQINKCLEAEYL  
YAKIKNREEFEMVFNGEPEHTNVCWFYIPQSLRGVPDSPQRREKLHKVAPKIKALMMESGTTMVGYPQPG  
DKANFFRMVISNPAATQSDIDFLIEEIERLGQDL

**TRTRPLEQKLISEEDLAANDILDYKDDDDKV**

**Tag:** C-Myc/DDK

**Predicted MW:** 66.7 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.

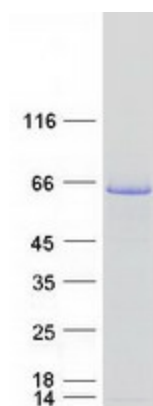
**Storage:** Store at -80°C.



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<b>Stability:</b>	Stable for 12 months from the date of receipt of the product under proper storage and handling conditions. Avoid repeated freeze-thaw cycles.
<b>RefSeq:</b>	<a href="#">NP_000808</a>
<b>Locus ID:</b>	2571
<b>UniProt ID:</b>	<a href="#">Q99259</a> , <a href="#">A0A0S2Z3V5</a> , <a href="#">Q8IVA8</a>
<b>RefSeq Size:</b>	3488
<b>Cytogenetics:</b>	2q31.1
<b>RefSeq ORF:</b>	1782
<b>Synonyms:</b>	CPSQ1; DEE89; GAD; SCP
<b>Summary:</b>	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 autoantigen and an autoreactive T cell target in insulin-dependent diabetes. This gene may also play a role in the stiff man syndrome. Deficiency in this enzyme has been shown to lead to pyridoxine dependency with seizures. Alternative splicing of this gene results in two products, the predominant 67-kD form and a less-frequent 25-kD form. [provided by RefSeq, Jul 2008]
<b>Protein Families:</b>	Druggable Genome
<b>Protein Pathways:</b>	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 GAD1 protein (Cat# [TP307226]). The protein was produced from HEK293T cells transfected with GAD1 cDNA clone (Cat# [RC207226]) using MegaTran 2.0 (Cat# [TT210002]).