

Product datasheet for PH307226

GAD67 (GAD1) (NM_000817) Human Mass Spec Standard

Product data:

Product Type:	Mass Spec Standards
Description:	GAD1 MS Standard C13 and N15-labeled recombinant protein (NP_000808)
Species:	Human
Expression Host:	HEK293
Expression cDNA Clone or AA Sequence:	RC207226
Predicted MW:	66.9 kDa
Protein Sequence:	>RC207226 protein sequence Red=Cloning site Green=Tags(s)

MASSTPSSSATSSNAGADPNTTTLRPTTYDTWCGVAHGCTRKLGLKICGFLQRTNSLEEKSRLLVSAFKER
QSSKNLLSCENSRRDARFRRTETDFSNLFARDLLPAKNGEEQTVQFLLEVVDILLNYVRKTFDRSTKVLD
FHHPHQLEGMGFNLELSDHPESLEQILVDCRDTLKYGVRTGHPFRFNQLSTGLDIIIGLAGEWLTSTAN
TNMFTYEIAPVFLMEQITLKKMREIVGWSSKGDGIFSPGGAINMYSIMAARYKYFPEVKTGMAAVP
KLVLFTSEQSRYSIKKAGAALGFGTDNVILIKCNERGEIIPADFEAKILEAKQKGYVPFYVNATAGTTVY
GAFDPIQEIADICEKYNLWLHVDAAWGGGLMSRKHRHKLNGIERANSVTWPNHKMMGVLLQCSAILVKE
KGILQGCNQMCAGYLFQDPKQYDVSYDTGDKAIQCGRHVDIFKFWLMWKAKGTGVFENQINKCLELAEYL
YAKIKNREEEFEMVFNGEPEHTNVCFWYIPQSLRGVDPSPQRREKLHKVAPKIKALMMESGTTMVGYQPQG
DKANFFRMVISNPAATQSDIDFLIEEIERLGQDL

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Tag:	C-Myc/DDK
Purity:	> 80% as determined by SDS-PAGE and Coomassie blue staining
Concentration:	>0.05 µg/µL as determined by microplate BCA method
Labeling Method:	Labeled with [U- ¹³ C ₆ , ¹⁵ N ₄]-L-Arginine and [U- ¹³ C ₆ , ¹⁵ N ₂]-L-Lysine
Buffer:	25 mM Tris-HCl, 100 mM glycine, pH 7.3
Storage:	Store at -80°C. Avoid repeated freeze-thaw cycles.
Stability:	Stable for 3 months from receipt of products under proper storage and handling conditions.
RefSeq:	NP_000808
RefSeq Size:	3488
RefSeq ORF:	1782



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Synonyms: CPSQ1; DEE89; GAD; SCP

Locus ID: 2571

UniProt ID: [Q99259](#), [A0A0S2Z3V5](#), [Q8IVA8](#)

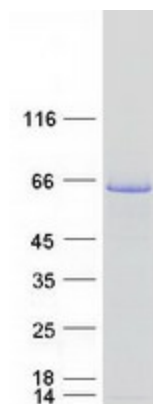
Cytogenetics: 2q31.1

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 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]

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 GAD1 protein (Cat# [TP307226]). The protein was produced from HEK293T cells transfected with GAD1 cDNA clone (Cat# [RC207226]) using MegaTran 2.0 (Cat# [TT210002]).