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Product datasheet for TA500330S

GAD67 (GAD1) Mouse Monoclonal Antibody [Clone ID: OTI5D8]

Product data:

Product Type:	Primary Antibodies
Clone Name:	OTI5D8
Applications:	IHC, IP, WB
Recommended Dilution:	WB: 1:200 - 1:1000, IHC: 1:50, IP: 4ug/mL
Reactivity:	Human, Mouse, Rat
Host:	Mouse
Isotype:	IgG1
Clonality:	Monoclonal
Immunogen:	Full-length protein expressed in 293T cell transfected with human GAD1 expression vector
Formulation:	PBS (pH 7.3) containing 1% BSA, 50% glycerol and 0.02% sodium azide.
Concentration:	0.5 mg/ml
Purification:	Purified from mouse ascites fluids or tissue culture supernatant by affinity chromatography (protein A/G)
Conjugation:	Unconjugated
Storage:	Store at -20°C as received.
Stability:	Stable for 12 months from date of receipt.
Predicted Protein Size:	66.9 kDa
Gene Name:	glutamate decarboxylase 1
Database Link:	NP_000808 Entrez Gene 14415 MouseEntrez Gene 24379 RatEntrez Gene 2571 Human Q99259

View online »

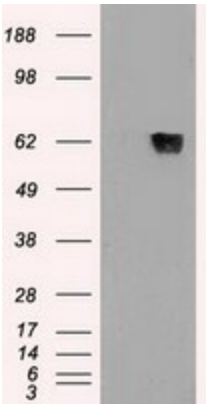
Background: This gene encodes one of several forms of glutamic acid decarboxylase, identified as a major autoantigen in insulin-dependent diabetes. The enzyme encoded is responsible for catalyzing the production of gamma-aminobutyric acid from L-glutamic acid. A pathogenic role for this enzyme has been 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.

Synonyms: CPSQ1; DEE89; GAD; SCP

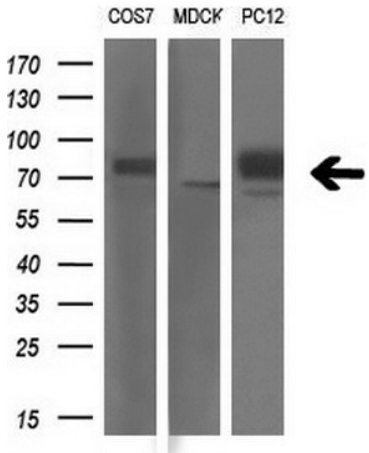
Protein Families: Druggable Genome

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

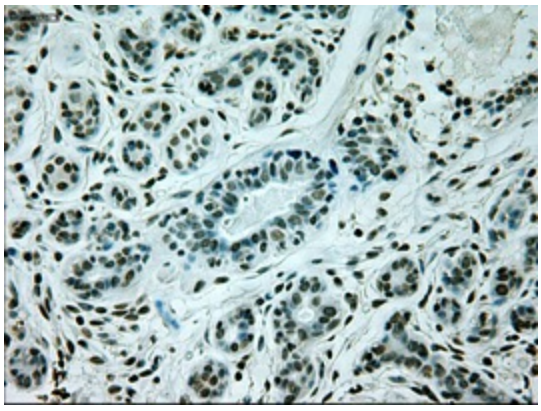
Product images:



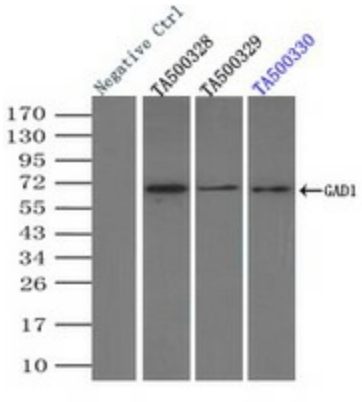
HEK293T cells were transfected with the pCMV6-ENTRY control (Left lane) or pCMV6-ENTRY GAD1 ([RC207226], Right lane) cDNA for 48 hrs and lysed. Equivalent amounts of cell lysates (5 ug per lane) were separated by SDS-PAGE and immunoblotted with anti-GAD1. Positive lysates [LY400290] (100ug) and [LC400290] (20ug) can be purchased separately from OriGene.



Western blot analysis of extracts (10ug) from 3 different cell lines by using anti-GAD1 monoclonal antibody (1:200).



Immunohistochemical staining of paraffin-embedded breast tissue within the normal limits using anti-GAD1 mouse monoclonal antibody. (Heat-induced epitope retrieval by 10mM citric buffer, pH6.0, 100°C for 10min, [TA500330], Dilution 1:50)



Immunoprecipitation of GAD1 by using TrueMab monoclonal anti-GAD1 antibodies (Negative control: IP without adding anti-GAD1 antibody.). For each experiment, 500ul of DDK tagged GAD1 overexpression lysates (at 1:5 dilution with HEK293T lysate), 2ug of anti-GAD1 antibody and 20ul (0.1mg) of goat anti-mouse conjugated magnetic beads were mixed and incubated overnight. After extensive wash to remove any non-specific binding, the immuno-precipitated products were analyzed with rabbit anti-DDK polyclonal antibody.