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Product datasheet for TA305623

GAD67 (GAD1) Goat Polyclonal Antibody

Product data:

Product Type:	Primary Antibodies
Applications:	FC, IF, PEP-ELISA, WB
Recommended Dilution:	ELISA: 1:32,000. WB: 0.5-1.5µg/ml.
Reactivity:	Human (Expected from sequence similarity: Mouse, Rat, Dog, Cow, Pig)
Host:	Goat
Isotype:	IgG
Clonality:	Polyclonal
Immunogen:	Peptide with sequence C-PDSPQRREKLHK, from the internal region of the protein sequence according to NP_000808.2.
Formulation:	0.5 mg/ml in Tris saline, 0.02% sodium azide, pH7.3 with 0.5% bovine serum albumin
Concentration:	lot specific
Purification:	Purified from goat serum by ammonium sulphate precipitation followed by antigen affinity chromatography using the immunizing peptide. Supplied at 0.5 mg/ml in Tris saline, 0.02% sodium azide, pH7.3 with 0.5% bovine serum albumin. Aliquot and store at -20C. Minimize freezing and thawing.
Conjugation:	Unconjugated
Storage:	Store at -20°C as received.
Stability:	Stable for 12 months from date of receipt.
Gene Name:	glutamate decarboxylase 1
Database Link:	NP_000808 Entrez Gene 14415 MouseEntrez Gene 24379 RatEntrez Gene 478794 DogEntrez Gene 2571 Human Q99259

View online »

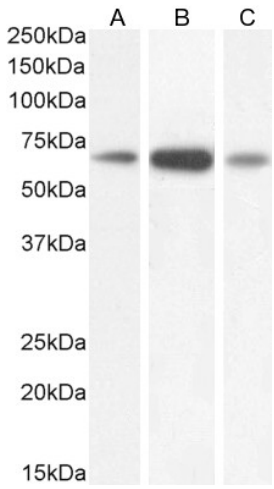
Background: This gene encodes one of several forms of glutamic acid decarboxylase, identified as a major autoantigen in insulin-dependent diabetes. The enzyme encoded is responsible for catalyzing the production of gamma-aminobutyric acid from L-glutamic acid. A pathogenic role for this enzyme has been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

Synonyms: CPSQ1; GAD; SCP

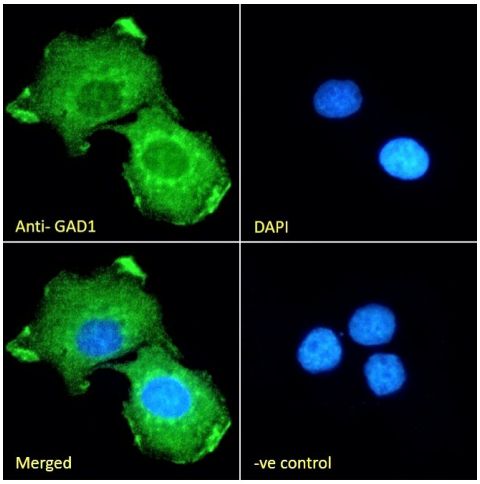
Protein Families: Druggable Genome

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

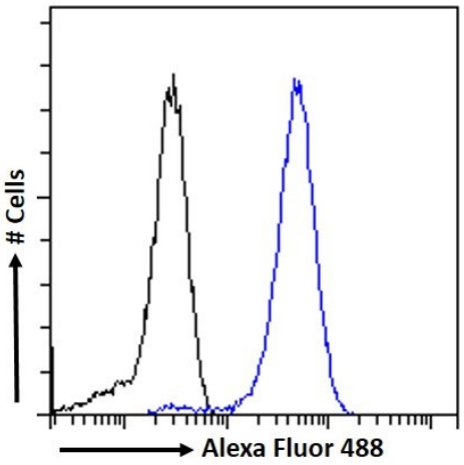
Product images:



TA305623 (1µg/ml) staining of Human Cerebellum (A) and Mouse Brain (B) and (0.3ug/ml) Rat Brain (C) lysate (35µg protein in RIPA buffer). Detected by chemiluminescence.



TA305623 Immunofluorescence analysis of paraformaldehyde fixed A431 cells, permeabilized with 0.15% Triton. Primary incubation 1hr (10ug/ml) followed by Alexa Fluor 488 secondary antibody (2ug/ml), showing membrane and cytoplasmic staining. The nuclear stain is DAPI (blue). Negative control: Unimmunized goat IgG (10ug/ml) followed by Alexa Fluor 488 secondary antibody (2ug/ml).



TA305623 Flow cytometric analysis of paraformaldehyde fixed A431 cells (blue line), permeabilized with 0.5% Triton. Primary incubation 1hr (10ug/ml) followed by Alexa Fluor 488 secondary antibody (1ug/ml). IgG control: Unimmunized goat IgG (black line) followed by Alexa Fluor 488 secondary antibody.