

**Goat Anti-GAD1 (isoform GAD67) Antibody**  
Peptide-affinity purified goat antibody  
Catalog # AF1458a

**Specification**

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**Goat Anti-GAD1 (isoform GAD67) Antibody - Product Information**

Application	WB
Primary Accession	<a href="#">Q99259</a>
Other Accession	<a href="#">NP_000808</a> , <a href="#">2571</a> , <a href="#">14415 (mouse)</a> , <a href="#">24379 (rat)</a>
Reactivity	Human
Predicted	Mouse, Rat, Pig, Dog
Host	Goat
Clonality	Polyclonal
Concentration	0.5 mg/ml
Isotype	IgG
Calculated MW	66897

**Goat Anti-GAD1 (isoform GAD67) Antibody - Additional Information**

**Gene ID** 2571

**Other Names**

Glutamate decarboxylase 1, 4.1.1.15, 67 kDa glutamic acid decarboxylase, GAD-67, Glutamate decarboxylase 67 kDa isoform, GAD1, GAD, GAD67

**Format**

0.5 mg IgG/ml in Tris saline (20mM Tris pH7.3, 150mM NaCl), 0.02% sodium azide, with 0.5% bovine serum albumin

**Storage**

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

**Precautions**

Goat Anti-GAD1 (isoform GAD67) Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

**Goat Anti-GAD1 (isoform GAD67) Antibody - Protein Information**

**Name** GAD1 ([HGNC:4092](#))

**Synonyms** GAD, GAD67

**Function**

Catalyzes the synthesis of the inhibitory neurotransmitter gamma-aminobutyric acid (GABA) with pyridoxal 5'-phosphate as cofactor.

### Tissue Location

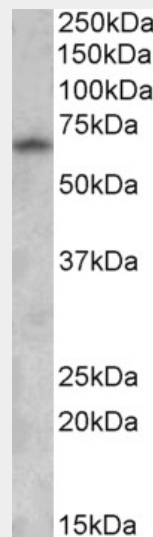
[Isoform 1]: Expressed in brain.

### Goat Anti-GAD1 (isoform GAD67) Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

### Goat Anti-GAD1 (isoform GAD67) Antibody - Images



AF1458a (0.5  $\mu\text{g/ml}$ ) staining of Human Brain (Cerebral Cortex) lysate (35  $\mu\text{g}$  protein in RIPA buffer). Primary incubation was 1 hour. Detected by chemiluminescence.

### Goat Anti-GAD1 (isoform GAD67) Antibody - 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.

### Goat Anti-GAD1 (isoform GAD67) Antibody - References

Common variants conferring risk of schizophrenia: a pathway analysis of GWAS data. Jia P, et al. Schizophr Res, 2010 Sep. PMID 20659789.  
Maternal genes and facial clefts in offspring: a comprehensive search for genetic associations in

two population-based cleft studies from Scandinavia. Jugessur A, et al. PLoS One, 2010 Jul 9. PMID 20634891.

Physiogenomic analysis of statin-treated patients: domain-specific counter effects within the ACACB gene on low-density lipoprotein cholesterol? Ruaño G, et al. Pharmacogenomics, 2010 Jul. PMID 20602615.

Alcohol dependence and glutamate decarboxylase gene polymorphisms in an Italian male population. Terranova C, et al. Alcohol, 2010 Aug. PMID 20598486.

Genetic modulation of GABA levels in the anterior cingulate cortex by GAD1 and COMT. Marengo S, et al. Neuropsychopharmacology, 2010 Jul. PMID 20357758.

**Goat Anti-GAD1 (isoform GAD67) Antibody - Citations**

- [Pain inhibition by optogenetic activation of specific anterior cingulate cortical neurons.](#)