

**Anti-GAD67 Antibody**  
**Catalog # ABO10525****Specification**

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**Anti-GAD67 Antibody - Product Information**

Application	WB
Primary Accession	<a href="#">Q99259</a>
Host	Rabbit
Reactivity	Human, Mouse, Rat
Clonality	Polyclonal
Format	Lyophilized

**Description**

Rabbit IgG polyclonal antibody for Glutamate decarboxylase 1(GAD1) detection. Tested with WB in Human;Mouse;Rat.

**Reconstitution**

Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

**Anti-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

**Calculated MW**

66897 MW KDa

**Application Details**

Western blot, 0.1-0.5 µg/ml, Human, Rat, Mouse<br>

**Tissue Specificity**

Isoform 3 is expressed in pancreatic islets, testis, adrenal cortex, and perhaps other endocrine tissues, but not in brain. .

**Protein Name**

Glutamate decarboxylase 1

**Contents**

Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na<sub>2</sub>HPO<sub>4</sub>, 0.05mg Thimerosal, 0.05mg NaN<sub>3</sub>.

**Immunogen**

A synthetic peptide corresponding to a sequence at the C-terminus of human GAD67(529-543aa PQRREKLHKVAPKIK), different from the related mouse and rat sequences by two amino acids.

**Purification**

Immunogen affinity purified.

**Cross Reactivity**

No cross reactivity with other proteins

**Storage**

**At -20°C for one year. After reconstitution, at 4°C for one month. It can also be aliquotted and stored frozen at -20°C for a longer time. Avoid repeated freezing and thawing.**

**Sequence Similarities**

Belongs to the group II decarboxylase family.

**Anti-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.

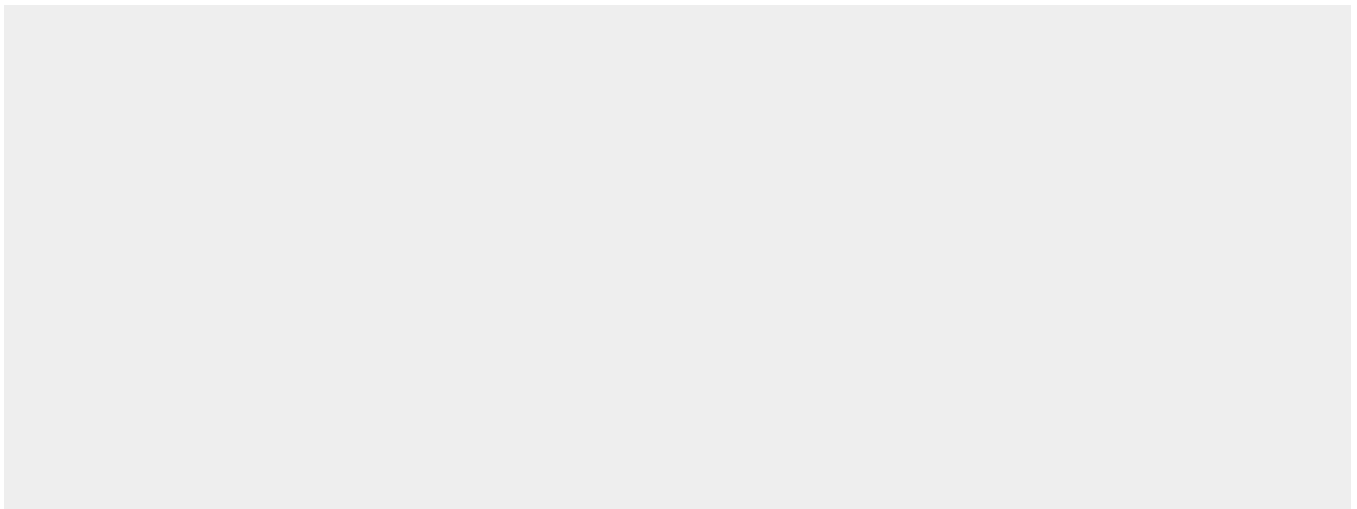
**Tissue Location**

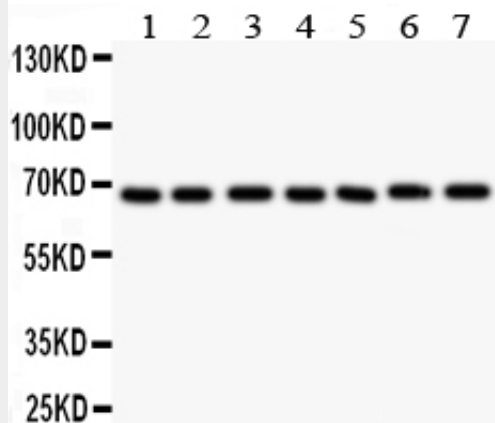
[Isoform 1]: Expressed in brain.

**Anti-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](#)

**Anti-GAD67 Antibody - Images**



Anti- GAD67 antibody, ABO10525, Western blotting All lanes: Anti GAD67(ABO10525) at 0.5ug/ml  
Lane 1: Rat Brain Tissue Lysate at 50ug  
Lane 2: Rat Testis Tissue Lysate at 50ug  
Lane 3: MCF-7 Whole Cell Lysate at 40ug  
Lane 4: MM231 Whole Cell Lysate at 40ug  
Lane 5: HELA Whole Cell Lysate at 40ug  
Lane 6: SMMC Whole Cell Lysate at 40ug  
Lane 7: COLO320 Whole Cell Lysate at 40ug  
Predicted bind size: 67KD  
Observed bind size: 67KD

#### Anti-GAD67 Antibody - Background

Glutamic acid decarboxylase(GAD) catalyses the conversion of L-glutamic acid to the inhibitory neurotransmitter gamma-aminobutyric acid(GABA). Two forms of human GAD, GAD65 and GAD67, are encoded by two separate genes. Human GAD65 cDNA encodes a Mr 65,000 polypeptide, with 585 amino acid residues, whereas human GAD67 encodes a Mr 67,000 polypeptide, with 594 amino acid residues. GAD67 gene consists of 16 exons, spread over more than 45 kb of genomic DNA. The GAD67 gene contains an additional exon(exon 0) that together with part of exon 1, specifies the 5' untranslated region of GAD67 mRNA. Human GAD67 shows 65% identity to GAD65 and is located in 2q31. GAD67 may play a role in the stiff man syndrome. Deficiency in this enzyme has been shown to lead to pyridoxine dependency with seizures.