

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

Anti-GAD67 Antibody - Product Information

Application	WB
Primary Accession	Q99259
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

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 Na₂HPO₄, 0.05mg Thimerosal, 0.05mg NaN₃.

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

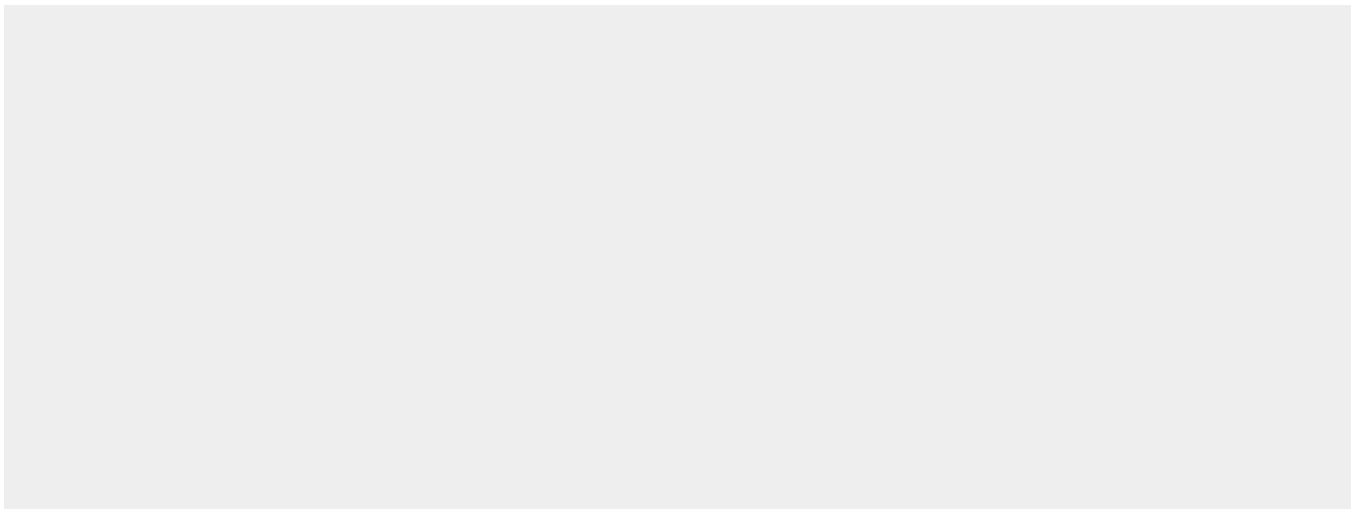
[Isoform 1]: Expressed in brain.

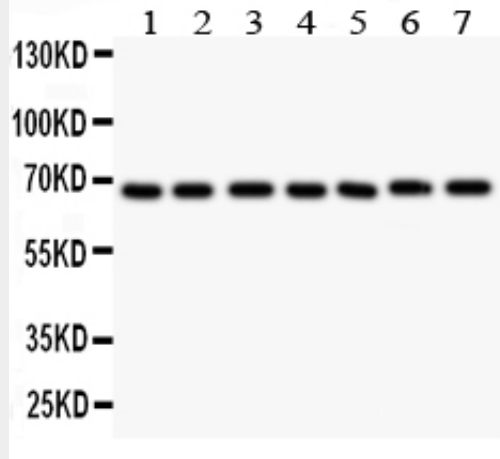
Anti-GAD67 Antibody - Protocols

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.