

Anti-GAD67 Picoband Antibody
Catalog # ABO11875**Specification****Anti-GAD67 Picoband 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 Picoband 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, Mouse, Rat

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 Na₃N.

Immunogen

E.coli-derived human GAD67 recombinant protein (Position: N14-D122). Human GAD67 shares 95% amino acid (aa) sequence identity with both mouse and rat GAD67.

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 Picoband 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

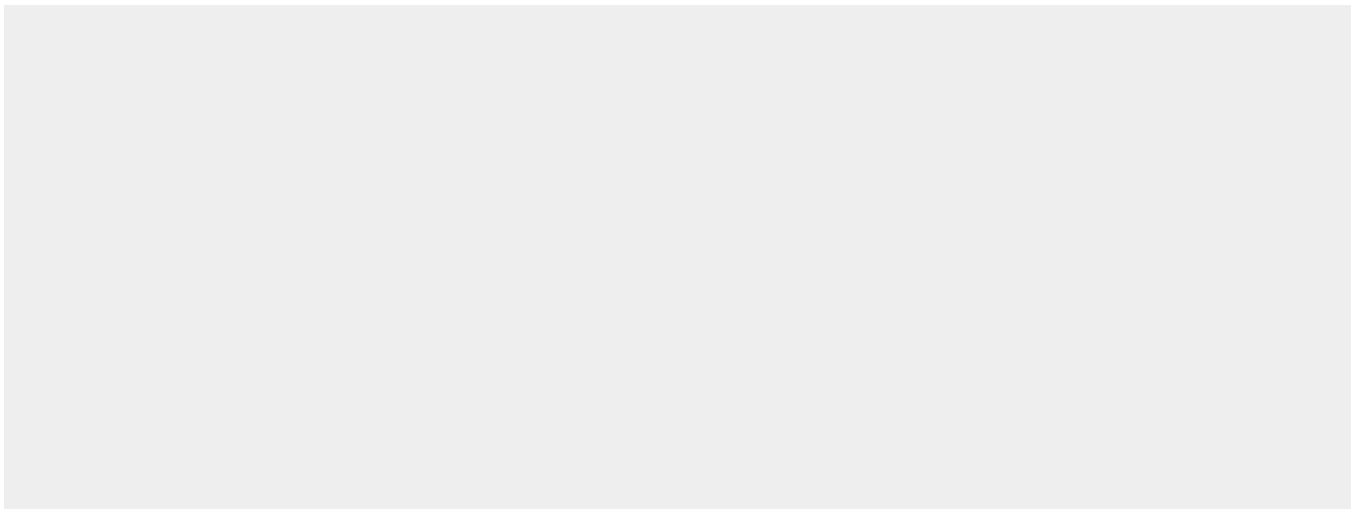
[Isoform 1]: Expressed in brain.

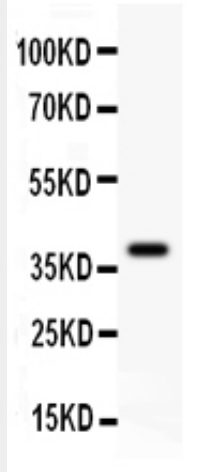
Anti-GAD67 Picoband Antibody - Protocols

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

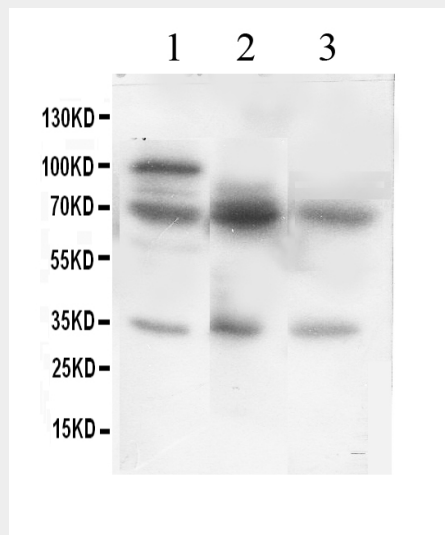
- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

Anti-GAD67 Picoband Antibody - Images





Anti- GAD67 Picoband antibody, ABO11875, Western blotting All lanes: Anti GAD67 (ABO11875) at 0.5ug/ml WB: Recombinant Human GAD67 Protein 0.5ng Predicted bind size: 39KD Observed bind size: 39KD



Anti- GAD67 Picoband antibody, ABO11875, Western blotting All lanes: Anti GAD67 (ABO11875) at 0.5ug/ml Lane 1: Rat Testis Tissue Lysate at 50ug Lane 2: Mouse Brain Tissue Lysate at 50ug Lane 3: MCF-7 Whole Cell Lysate at 40ug Predicted bind size: 67KD Observed bind size: 67KD

Anti-GAD67 Picoband Antibody - Background

Glutamate decarboxylase 1 (brain, 67kDa) (GAD67), also known as GAD1, is a human gene. It is mapped to 2q31.1. 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.