

Anti-GAD67 Picoband Antibody

Catalog # ABO11875

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.

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
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. .
Source	Eukaryota
Protein Name	Glutamate decarboxylase 1
Contents	Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na2HPO4, 0.05mg NaN3.
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.

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.

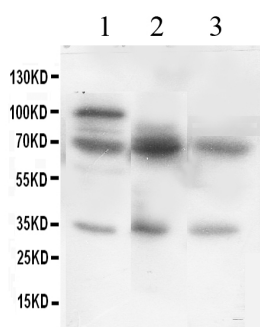
Background

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.

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

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.