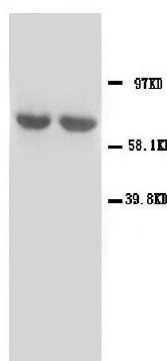
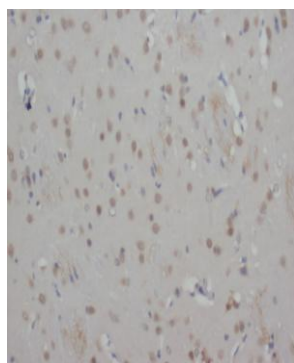




Product Information Sheet

Polyclonal Anti-Glutamic acid decarboxylase 67, **GAD67**



Catalogue No. PA1036

Lot No. 03A01

Ig type: rabbit IgG

Size: 100µg/vial

Specificity

Human, mouse, rat.

No cross reactivity with other proteins.

Recommended application

Western blot

Immunohistochemistry(P)

Immunogen

A peptide mapping very near the N-terminal end of GAD67 of human origin, identical to the related mouse sequence.

Purity

Immunogen affinity purified.

Application

Western blot

At 1-2µg/ml with the appropriate system to detect GAD67 in cells and tissues.

Immunohistochemistry(P)

At 1-2µg/ml to detect GAD67 in formalin fixed and paraffin embedded tissues. Boiling the sections is required.

Other applications have not been tested.

Optimal dilutions should be determined by end user.

Contents

Each vial contains 50% glycerol, 0.9mg NaCl, 0.2mg Na₂HPO₄.

Reconstitution

1.2% sodium acetate or neutral PBS. If 0.5ml of PBS is used, the antibody concentration will be 100µg/ml.

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 longer time.

To reorder contact us at:

Antagene, Inc.

Toll Free: 1(866)964-2589

email: Info@antageneinc.com

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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.

REFERENCE

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2. Bu, D.-F.; Erlander, M. G.; Hitz, B. C.; Tillakaratne, N. J. K.; Kaufman, D. L.; Wagner-McPherson, C. B.; Evans, G. A.; Tobin, A. J. : Two human glutamate decarboxylases, 65-kDa GAD and 67-kDa GAD, are each encoded by a single gene. *Proc. Nat. Acad. Sci.* 89: 2115-2119, 1992.
3. Bu, D.-F.; Tobin, A. J. : The exon-intron organization of the genes (GAD1 and GAD2) encoding two human glutamate decarboxylases (GAD-67 and GAD-65) suggests that they derive from a common ancestral GAD. *Genomics* 21: 222-228, 1994.