

## 39-2047: Anti-GAD67 Polyclonal Antibody

<b>Clonality :</b>	Polyclonal
<b>Application :</b>	WB
<b>Reactivity :</b>	Human
<b>Gene :</b>	GAD1
<b>Gene ID :</b>	2571
<b>Uniprot ID :</b>	Q99259
<b>Alternative Name :</b>	Glutamate decarboxylase 1; 4.1.1.15; 67 kDa glutamic acid decarboxylase; GAD-67; Glutamate decarboxylase 67 kDa isoform; GAD1; GAD, GAD67
<b>Isotype :</b>	Rabbit IgG

### Description

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.

### Product Info

<b>Amount :</b>	100 µg/vial
<b>Purification :</b>	Immunogen affinity purified.
<b>Content :</b>	Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na <sub>2</sub> HPO <sub>4</sub> , 0.05mg Thimerosal, 0.05mg Na <sub>3</sub> . Reconstitute : Add 0.2ml of distilled water will yield a concentration of 500ug/ml.
<b>Storage condition :</b>	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.

### Application Note

Western blot : 0.1-0.5µg/ml; Immunohistochemistry(Paraffin-embedded Section) : 0.5-1µg/ml

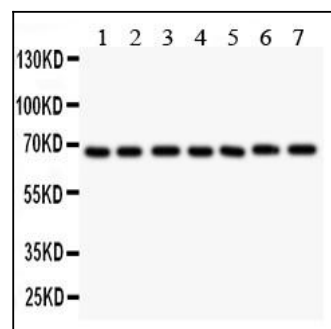


Figure 1: Anti-GAD67 antibody(39-2047). Western blotting: Lanes: Anti GAD67 antibody(39-2047)) at 0.5ug/ml with Lane 1: Rat Brain Tissue Lysate at 50ug, Lane 2: Rat Testis Tissue Lysate at 50ug, Lane 3: MCF-7 Whole Cell Lysate at 40ug, Lane 4: MM231 Whole Cell Lysate at 40ug, Lane 5: HELA Whole Cell Lysate at 40ug, Lane 6: SMMC Whole Cell Lysate at 40ug, Lane 7: COLO320 Whole Cell Lysate at 40ug. Predicted band size: 67 kDa. Observed band size: 67 kDa.