# GAD65 Polyclonal ANTIBODY

**Catalog Number:** 21760-1-AP

## Basic Information

<table>
<thead>
<tr>
<th>Catalog Number:</th>
<th>21760-1-AP</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Size:</strong></td>
<td>40 μg/150 μl</td>
</tr>
<tr>
<td><strong>Source:</strong></td>
<td>Rabbit</td>
</tr>
<tr>
<td><strong>Isotype:</strong></td>
<td>IgG</td>
</tr>
<tr>
<td><strong>Purification Method:</strong></td>
<td>Antigen affinity purification</td>
</tr>
</tbody>
</table>

### GenBank Accession Number:

| BC138307 |

### GeneID (NCBI):

| 2572 |

### Full Name:

glutamate decarboxylase 2 (pancreatic islets and brain, 65kDa)

### Calcd MW:

585aa, 65 kDa

### Observed MW:

65 kDa

## Applications

### Tested Applications:

IF, IHC, IP, WB, ELISA

### Cited Applications:

WB

### Species Specificity:

human, mouse, rat

### Cited Species:

human

## Background Information

GAD2, also named as GAD65, belongs to the group II decarboxylase family. GAD2 catalyzes the production of GABA. It is responsible for the synthesis of the essential neurotransmitter gamma-aminobutyric acid (GABA) from L-glutamic acid. GAD2 is expressed in nervous and endocrine systems and are thought to be involved in synaptic transmission and insulin secretion. Autoantibodies against GAD2 may serve as markers for type I diabetes. Many individuals suffering from an adult onset disorder known as Stiff Person Syndrome (SPS) also express autoantibodies to GAD2. The antibody is specific to GAD2.

## Notable Publications

<table>
<thead>
<tr>
<th>Author</th>
<th>PubMed ID</th>
<th>Journal</th>
<th>Application</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yue Li</td>
<td>26031892</td>
<td>Neuropharmacology</td>
<td>WB</td>
</tr>
</tbody>
</table>

## Storage

Store at -20ºC. Stable for one year after shipment.

### Storage Buffer:

PBS with 0.1% sodium azide and 50% glycerol pH 7.3.

### Aliquoting:

Aliquoting is unnecessary for -20ºC storage.
Selected Validation Data

Mouse brain tissue were subjected to SDS PAGE followed by western blot with 21760-1-AP GAD65 antibody at dilution of 1:600 incubated at room temperature for 1.5 hours.

IP Result of anti-GAD65 (IP:21760-1-AP, 3ug; Detection:21760-1-AP 1:300) with rat brain tissue lysate 400ug.

Immunohistochemistry of paraffin-embedded human colon tissue slide using 21760-1-AP (GAD65 antibody at dilution of 1:200 (under 10x lens)).

Immunofluorescent analysis of (4% PFA) fixed mouse brain tissue using 21760-1-AP (GAD65 antibody) at dilution of 1:50 and Alexa Fluor 488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L).

Immunohistochemistry of paraffin-embedded human colon tissue slide using 21760-1-AP, GAD65 antibody at dilution of 1:200 (under 10x lens).