10320 Camino Santa Fe, Suite G
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Tel: 858.875.1900 Fax: 858.875.1999

Anti-GAD65 Picoband Antibody

Catalog # ABO10278

Specification

Anti-GAD65 Picoband Antibody - Product Information

Application	**WB, IHC-P**
Primary Accession	Q05329
Host	**Rabbit**
Reactivity	**Human, Mouse, Rat**
Clonality	**Polyclonal**
Format	**Lyophilized**

Description
Rabbit IgG polyclonal antibody for Glutamate decarboxylase 2(GAD2) detection. Tested with WB, IHC-P in Human;Mouse;Rat.

Reconstitution
Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

Anti-GAD65 Picoband Antibody - Additional Information

Gene ID 2572

Other Names
Glutamate decarboxylase 2, 4.1.1.15, 65 kDa glutamic acid decarboxylase, GAD-65, Glutamate decarboxylase 65 kDa isoform, GAD2, GAD65

Calculated MW
65411 MW KDa

Application Details
Immunohistochemistry(Paraffin-embedded Section), 0.5-1 µg/ml, Human, Mouse, Rat, By Heat

Western blot, 0.1-0.5 µg/ml, Mouse, Rat, Human

Subcellular Localization
Cytoplasm, cytosol . Cytoplasmic vesicle . Cell junction, synapse, presynaptic cell membrane ; Lipid-anchor . Golgi apparatus membrane ; Peripheral membrane protein ; Cytoplasmic side . Associated to cytoplasmic vesicles. In neurons, cytosolic leaflet of Golgi membranes and presynaptic clusters.

Protein Name
Glutamate decarboxylase 2

Contents
Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na2HPO4, 0.05mg NaN3.

Immunogen
A synthetic peptide corresponding to a sequence at the N-terminus of human GAD65 (131-164aa KVIDFHYPNELLQEYNWELADQPQNLEEILMHCQ), different from the related mouse and rat sequences by one amino acid.

Purification
Immunogen affinity purified.

Cross Reactivity
No cross reactivity with other proteins

Storage	**At -20˚C for one year. After r˚Constitution, 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.**

Anti-GAD65 Picoband Antibody - Protein Information

Name GAD2 (HGNC:4093)

Synonyms GAD65

Function
Catalyzes the production of GABA.

Cellular Location
Cytoplasm, cytosol. Cytoplasmic vesicle. Presynaptic cell membrane; Lipid-anchor. Golgi apparatus membrane; Peripheral membrane protein; Cytoplasmic side. Note=Associated to cytoplasmic vesicles In neurons, cytosolic leaflet of Golgi membranes and presynaptic clusters

Anti-GAD65 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 Cytomety
- Cell Culture

Anti-GAD65 Picoband Antibody - Images

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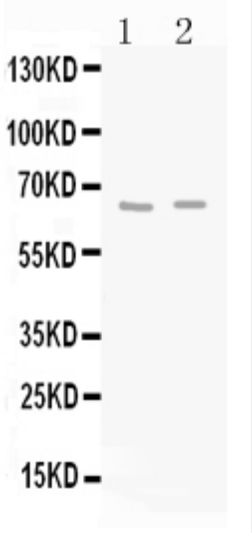
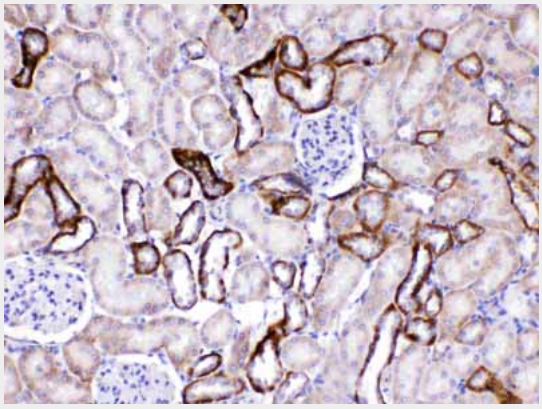
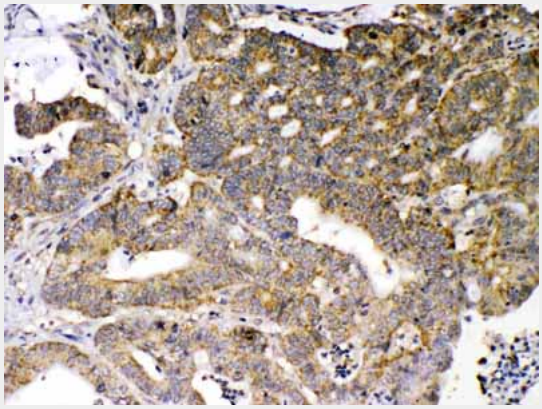


Western blot analysis of GAD65 expression in rat brain extract (lane 1) and mouse brain extract (lane 2). GAD65 at 65KD was detected using rabbit anti- GAD65 Antigen Affinity purified polyclonal antibody (Catalog #ABO10278) at 0.5 Î¼g/mL. The blot was developed using chemiluminescence (ECL) method .



GAD65 was detected in paraffin-embedded sections of rat kidney tissues using rabbit anti- GAD65 Antigen Affinity purified polyclonal antibody (Catalog #) at 1 Î¼g/mL. The immunohistochemical section was developed using SABC method .



GAD65 was detected in paraffin-embedded sections of human intetsinal cancer tissues using rabbit anti- GAD65 Antigen Affinity purified polyclonal antibody (Catalog #) at 1 Î¼g/mL. The immunohistochemical section was developed using SABC method .

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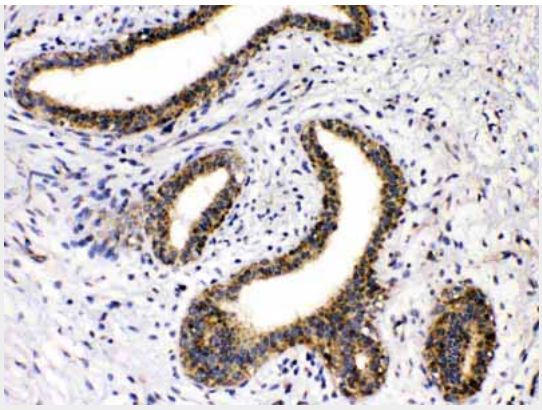

GAD65 was detected in paraffin-embedded sections of human mammary cancer tissues using rabbit anti- GAD65 Antigen Affinity purified polyclonal antibody (Catalog #) at 1 Î¼g/mL. The immunohistochemical section was developed using SABC method .

Anti-GAD65 Picoband Antibody - Background

Glutamate decarboxylase 2, also known as GAD65, is an enzyme that in humans is encoded by the GAD2 gene. 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 autoantibody and an autoreactive T cell target in insulin-dependent diabetes. This gene may also play a role in the stiff man syndrome. Alternative splicing results in multiple transcript variants that encode the same protein.