

Datasheet for ABIN6939483  
**anti-GAD65 antibody (AA 6-99)**

## 3 Images

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## Overview

Quantity:	100 µg
Target:	GAD65 (GAD2)
Binding Specificity:	AA 6-99
Reactivity:	Human
Host:	Mouse
Clonality:	Monoclonal
Conjugate:	This GAD65 antibody is un-conjugated
Application:	Immunohistochemistry (IHC), Staining Methods (StM)

## Product Details

Immunogen:	Recombinant human GAD2 (GAD65) protein fragment (around aa 6-99) (exact sequence is proprietary)
Clone:	GAD2-1960
Isotype:	IgG2b kappa
Specificity:	This MAb recognizes a protein of 65 kDa, which is identified as glutamic acid decarboxylase 2 (GAD2). It is responsible for catalyzing the production of gamma-aminobutyric acid from L-glutamic acid. There are two forms of glutamic acid decarboxylases (GAD s) that are found in the brain: GAD2 (also known as GAD65) and GAD1 (also known as GAD67). GAD1 and GAD2 are members of the group II decarboxylase family of proteins and are responsible for catalyzing the rate-limiting step in the production of GABA (-aminobutyric acid) from L-glutamic acid. Although both GAD s are found in the brain, GAD2 localizes to synaptic vesicle membranes in nerve

## Product Details

terminals, while GAD1 is distributed throughout the cell. A pathogenic role for GAD2 is identified in the human pancreas since it has been identified as an autoantibody and an auto-reactive T cell target in insulin-dependent diabetes.

Purification: Purified by Protein A/G

## Target Details

Target: GAD65 (GAD2)

Alternative Name: GAD2 ([GAD2 Products](#))

Molecular Weight: 65kDa

Gene ID: 2572

UniProt: [Q05329](#)

## Application Details

Application Notes: Positive Control: Pancreas or Brain (IHC).  
Known Application: Immunohistochemistry (Formalin-fixed) (0.1-0.2 µg/mL for 30 min at RT)(Staining of formalin-fixed tissues requires boiling tissue sections in 10 mM Citrate Buffer, pH 6.0, for 10-20 min followed by cooling at RT for 20 minutes)Optimal dilution for a specific application should be determined.

Restrictions: For Research Use only

## Handling

Concentration: 200 µg/mL

Buffer: 10 mM PBS with 0.05 % BSA & 0.05 % azide.

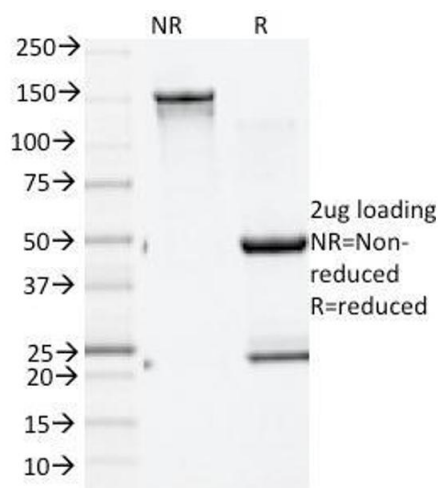
Preservative: Sodium azide

Precaution of Use: This product contains Sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.

Storage: 4 °C, -80 °C

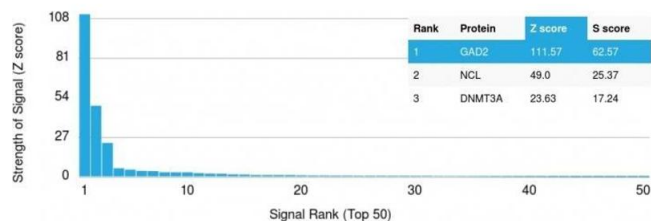
Storage Comment: Antibody with azide - store at 2 to 8°C. Antibody without azide - store at -20 to -80°C. Antibody is stable for 24 months. Non-hazardous. No MSDS required.

Expiry Date: 24 months



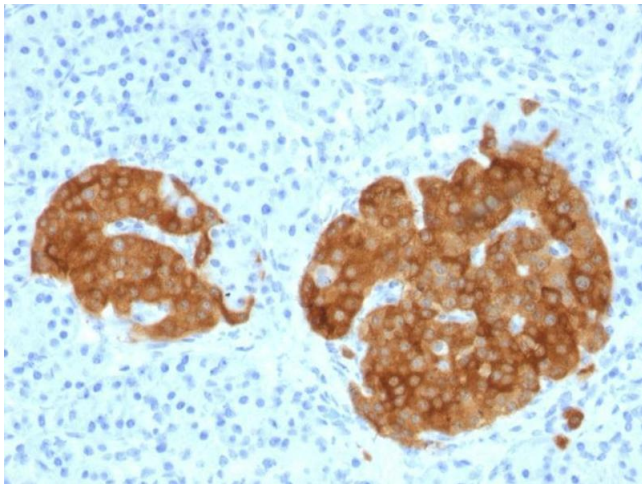
### SDS-PAGE

**Image 1.** SDS-PAGE Analysis Purified GAD2 (GAD65) Mouse Monoclonal Antibody (GAD2/1960). Confirmation of Integrity and Purity of Antibody.



### Protein Array

**Image 2.** Analysis of Protein Array containing more than 19,000 full-length human proteins using GAD2 (GAD65) Mouse Monoclonal Antibody (GAD2/1960) Z- and S- Score: The Z-score represents the strength of a signal that a monoclonal antibody (Monoclonal Antibody) (in combination with a fluorescently-tagged anti-IgG secondary antibody) produces when binding to a particular protein on the HuProt™ array. Z-scores are described in units of standard deviations (SDs) above the mean value of all signals generated on that array. If targets on HuProt™ are arranged in descending order of the Z-score, the S-score is the difference (also in units of SDs) between the Z-score. S-score therefore represents the relative target specificity of a Monoclonal Antibody to its intended target. A Monoclonal Antibody is considered to specific to its intended target, if the Monoclonal Antibody has an S-score of at least 2.5. For example, if a Monoclonal Antibody binds to protein X with a Z-score of 43 and to protein Y with a Z-score of 14, then the S-score for the binding of that Monoclonal Antibody to protein X is equal to 29.



#### Immunohistochemistry

**Image 3.** Formalin-fixed, paraffin-embedded human Pancreas stained with GAD2 (GAD65) Mouse Monoclonal Antibody (GAD2/1960).