

Datasheet for ABIN6939481  
**anti-GAD antibody (AA 72-135)**[Go to Product page](#)

## 4 Images

## Overview

Quantity:	100 µg
Target:	GAD (GAD1)
Binding Specificity:	AA 72-135
Reactivity:	Human
Host:	Mouse
Clonality:	Monoclonal
Conjugate:	This GAD antibody is un-conjugated
Application:	Western Blotting (WB), Immunohistochemistry (IHC), ELISA, Coating (Coat), Staining Methods (StM)

## Product Details

Immunogen:	Recombinant human GAD1 (GAD67) protein fragment (around aa 72-135) (exact sequence is proprietary)
Clone:	GAD1-2391
Isotype:	IgG1 kappa
Specificity:	This MAb recognizes a protein of 67 kDa, which is identified as glutamic acid decarboxylase 1 (GAD1). There are two forms of glutamic acid decarboxylases (GADs) that are found in the brain: GAD65 (also known as GAD2) and GAD67 (also known as GAD1). GAD65 and GAD67 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, GAD65 localizes to synaptic vesicle membranes in nerve

## Product Details

terminals, while GAD67 is distributed throughout the cell. GAD67 is responsible for the basal levels of GABA synthesis. In the case of a heightened demand for GABA in neurotransmission, GAD65 will transiently activate to assist in GABA production. The loss of GAD65 is detrimental and can impair GABA neurotransmission, however the loss of GAD67 is lethal.

Purification: Purified by Protein A/G

## Target Details

Target: GAD (GAD1)

Alternative Name: GAD1 ([GAD1 Products](#))

Molecular Weight: 67kDa

Gene ID: 2571

UniProt: [Q99259](#)

## Application Details

Application Notes: Positive Control: K-562 or HEK293 cells. Pancreas.  
Known Application: ELISA (For coating, order antibody without BSA), Western Blot (0.5-1 µg/mL), Immunohistochemistry (Formalin-fixed) (1-2 µg/mL for 30 minutes 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

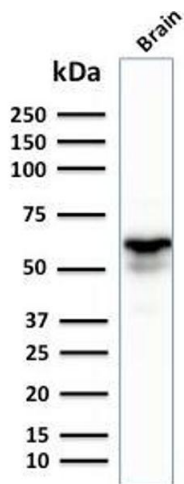
Buffer: 10 mM PBS with 0.05 % BSA & 0.05 % azide.

Preservative: Sodium azide

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

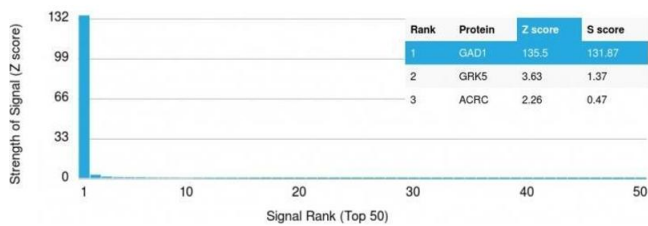
Storage: 4 °C, -80 °C

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.



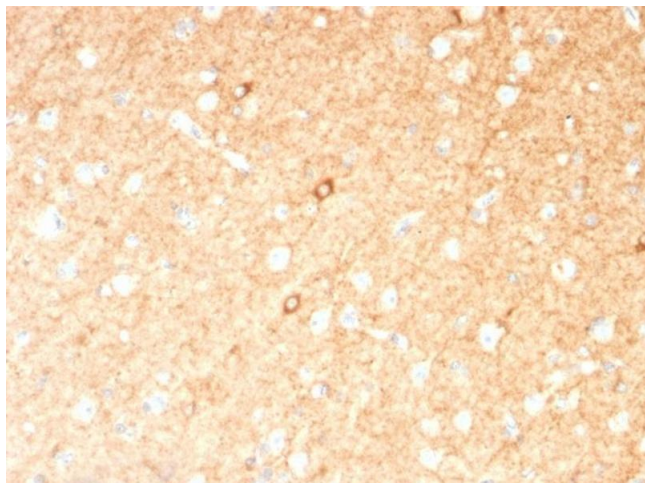
### Western Blotting

**Image 1.** Western Blot Analysis of human Brain tissue lysate using GAD1 (GAD67) Mouse Monoclonal Antibody (GAD1/2391).



### Protein Array

**Image 2.** Analysis of Protein Array containing more than 19,000 full-length human proteins using GAD1 (GAD67) Mouse Monoclonal Antibody (GAD1/2391) Z- and S- Score: The Z-score represents the strength of a signal that a monoclonal antibody (MAb) (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 MAb to its intended target. A MAb is considered to specific to its intended target, if the MAb has an S-score of at least 2.5. For example, if a MAb 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 MAb to protein X is equal to 29.



#### Immunohistochemistry

**Image 3.** Formalin-fixed, paraffin-embedded human Brain stained with GAD1 (GAD67) Mouse Monoclonal Antibody (GAD1/2391).

Please check the [product details page](#) for more images. Overall 4 images are available for ABIN6939481.