

**GAD2 Antibody**  
**Mouse Monoclonal Antibody (Mab)**  
**Catalog # AM2049b**

**Specification**

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**GAD2 Antibody - Product Information**

Application	WB,E
Primary Accession	<a href="#">Q05329</a>
Other Accession	<a href="#">NP_000809.1</a>
Reactivity	Human, Mouse, Rat
Host	Mouse
Clonality	Monoclonal
Isotype	IgG1
Antigen Region	445-473

**GAD2 Antibody - Additional Information**

**Gene ID** 2572

**Other Names**

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

**Target/Specificity**

This GAD2 antibody is generated from mice immunized with a KLH conjugated synthetic peptide between 445-473 amino acids from human GAD2.

**Dilution**

WB~~1:500

**Format**

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is prepared by Saturated Ammonium Sulfate (SAS) precipitation followed by dialysis against PBS.

**Storage**

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

**Precautions**

GAD2 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

**GAD2 Antibody - Protein Information**

**Name** GAD2 ([HGNC:4093](#))

**Synonyms** GAD65

**Function** Catalyzes the production of GABA.

### Cellular Location

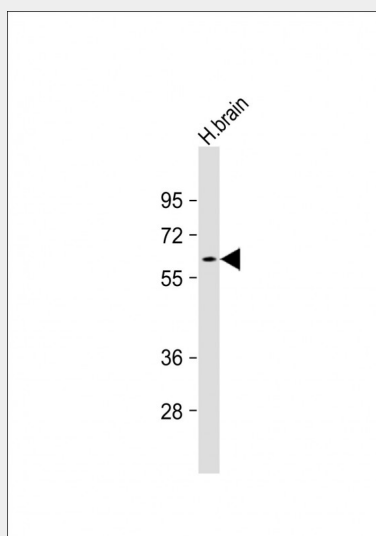
Cytoplasm, cytosol. Cytoplasmic vesicle. Presynaptic cell membrane; Lipid-anchor. Golgi apparatus membrane; Peripheral membrane protein; Cytoplasmic side. Note=Associated to cytoplasmic vesicles In neurons, cytosolic leaflet of Golgi membranes and presynaptic clusters

### GAD2 Antibody - Protocols

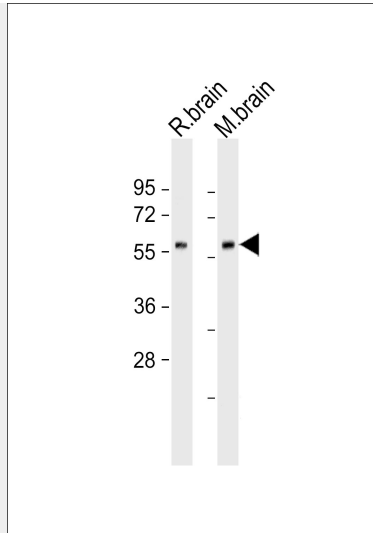
Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

### GAD2 Antibody - Images



Anti- at 1:500 dilution + human brain lysate Lysates/proteins at 20  $\mu$ g per lane. Secondary Goat Anti-mouse IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 65 kDa  
Blocking/Dilution buffer: 5% NFDM/TBST.



"All lanes : Anti-GAD2 Antibody at 1:500 dilution Lane 1: rat brain lysate Lane 2: mouse brain lysate Secondary Goat Anti-mouse IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 65411 Da Blocking/Dilution buffer: 5% NFDN/TBST."

### **GAD2 Antibody - Background**

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.

### **GAD2 Antibody - References**

Bailey, S.D., et al. Diabetes Care 33(10):2250-2253(2010)  
Jia, P., et al. Schizophr. Res. 122 (1-3), 38-42 (2010) :  
Ruano, G., et al. Pharmacogenomics 11(7):959-971(2010)  
Pinheiro, A.P., et al. Am. J. Med. Genet. B Neuropsychiatr. Genet. 153B (5), 1070-1080 (2010) :  
Jugessur, A., et al. PLoS ONE 5 (7), E11493 (2010) :