

## GAD2 / GAD65 (GABAergic Neuronal Marker) Antibody

Mouse Monoclonal Antibody [Clone MSVA-602M]

Catalog No	Format	Size
2572-MSM17-P0	Purified Ab with BSA and Azide	20 ug
2572-MSM17-P1	Purified Ab with BSA and Azide	100 ug

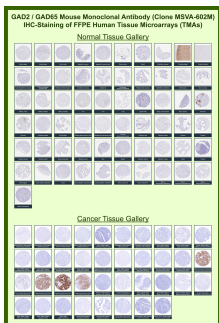
Applications	Tested Dillution	Note
Immunohistochemistry (IHC)	1:100-1:200	Manual Protocol: Freshly cut sections should be used (less than 10 days between cutting and staining). Heat-induced antigen retrieval for 5 minutes in an autoclave at 121°C in pH 7.8 Target Retrieval Solution buffer. Apply the antibody at a dilution of 1:150 at 37°C for 60 minutes. Visualization of bound antibody by the EnVision Kit (Dako, Agilent) according to the manufacturer's directions.

### Product Details

<b>Clone</b>	MSVA-602M
<b>Immunogen</b>	Recombinant fragment of human GAD2 (GAD65) protein (around aa 1-200) (exact sequence is proprietary)
<b>Host</b>	Mouse
<b>Clonality</b>	Monoclonal
<b>Isotype / Light Chain</b>	IgG1 / Kappa
<b>Mol. Weight of Antigen</b>	65kDa
<b>Cellular Localization</b>	Cytoplasm
<b>Species Reactivity</b>	Human
<b>Positive Control</b>	Pancreas: A strong GAD2 staining should be seen in pancreatic islet cells.

\*Optimal dilution for a specific application should be determined.

### Product Images for GAD2 / GAD65 (GABAergic Neuronal Marker) Antibody



Glutamate decarboxylase 2 Mouse Monoclonal Antibody (MSVA-602M) tested on many normal and cancer tissues. The immunohistochemistry staining in these tissues aligns with the expression data in Human Protein Atlas.

### **Specificity & Comments**

This MAb recognizes a protein of 65kDa, 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 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. ?

---

### **Limitations and Warranty**

This antibody is available for research use only and is not approved for use in diagnosis. There are no warranties, expressed or implied, which extend beyond this description. Company is not liable for any personal injury or economic loss resulting from this product.

---

### **Supplied As**

Ab produced in CHO cell mammalian-based expression system. Prepared in 10mM PBS with 0.05% BSA & 0.05% azide. Also available WITHOUT BSA & azide.

---

### **Storage and Stability**

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.

---

### **Research Areas**

Cardiovascular, Neural Stem Cells, Neuroscience, Transcription Factors

---