GAD1 / GAD67 (GABAergic Neuronal Marker) Antibody

Mouse Monoclonal Antibody [Clone BICCN-GAD67-1A6]

Catalog No	Format	Size
2571-MSM25-P1ABX	Purified Ab WITHOUT BSA and Azide at 1.0mg/ml	100 ug
2571-MSM25-P1	Purified Ab with BSA and Azide at 200ug/ml	100 ug
2571-MSM25-P0	Purified Ab with BSA and Azide at 200ug/ml	20 ug

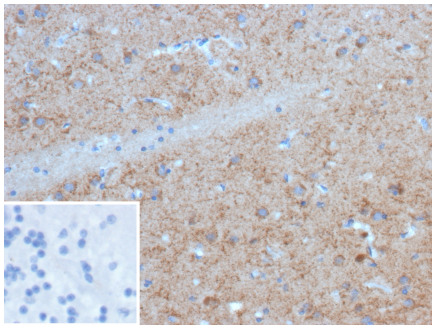
Applications	Tested Dillution	Note
Western Blot (WB)	2-4ug/ml	

Product Details

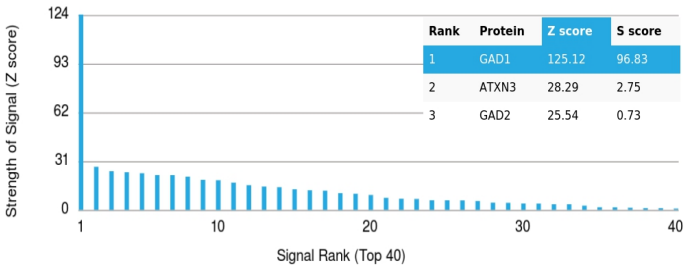
Clone	BICCN-GAD67-1A6
Gene Name	GAD1
Immunogen	Recombinant human GAD1 (GAD67) protein (exact sequence is proprietary)
Host	Mouse
Clonality	Monoclonal
Isotype / Light Chain	IgG2c / Kappa
Mol. Weight of Antigen	~67kDa
Cellular Localization	Cytoplasm
Species Reactivity	Human
Positive Control	K-562 or HEK293 cells. Human brain or pancreas.

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

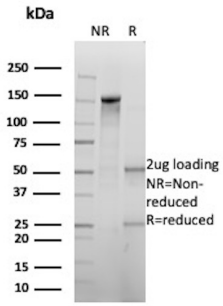
Product Images for GAD1 / GAD67 (GABAergic Neuronal Marker) Antibody



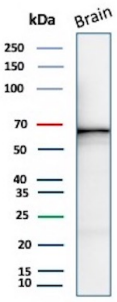
Formalin-fixed, paraffin-embedded human brain stained with GAD1 (GAD67) Mouse Monoclonal Antibody (BICCN-GAD67-1A6). Inset: PBS instead of primary antibody; secondary only negative control.



Analysis of Protein Array containing more than 19,000 full-length human proteinsusing GAD1 (GAD67) Mouse Monoclonal Antibody (BICCN-GAD67-1A6). 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 HuProtTM array. Z-scores are described in units of standard deviations (SD's) above the mean value of all signals generated on that array. If targets on HuProtTM are arranged in descending order of the Z-score, the S-score is the difference (also in units of SD's) 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.



SDS-PAGE Analysis of Purified Glutamate decarboxylase 1 / GAD1 Mouse Monoclonal Antibody (BICCN-GAD67-1A6). Confirmation of Purity and Integrity of Antibody.



Western blot analysis of human brain tissue lysate using GAD1 (GAD67)Mouse Monoclonal Antibody (BICCN-GAD67-1A6).

Specificity & Comments

This MAb recognizes a protein of 67kDa, 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 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.

Supplied As

200ug/ml of Ab Purified from Bioreactor Concentrate by Protein A/G. Prepared in 10mM PBS with 0.05% BSA & 0.05% azide. Also available WITHOUT BSA & azide at 1.0mg/ml.

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

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.