

Anti-GAD67 Antibody [GAD1/2391] (A248674)

Specifications:

Name:	Anti-GAD67 Antibody [GAD1/2391]
Description:	Mouse monoclonal [GAD1/2391] antibody to GAD67.
Specificity:	This antibody 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 GADs 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.
Applications:	ELISA, WB, IHC-P
Recommended Dilutions:	WB: 1-2 µg/ml, IHC-P: 1-2 µg/ml
Reactivity:	Human
Immunogen:	Recombinant fragment, around amino acids 72-135, of human GAD67 protein. The exact sequence is proprietary.
Host:	Mouse
Clonality:	Monoclonal
Clone ID:	GAD1/2391
Isotype:	IgG1
Light Chains:	kappa
Conjugate:	Unconjugated
Purification:	Protein A/G chromatography.
Concentration:	200 µg/ml
Product Form:	Liquid
Formulation:	Supplied in 10mM Phosphate Buffered Saline with 0.05% BSA and 0.05% Sodium Azide.
Storage:	Shipped at 4°C. Upon delivery aliquot and store at -20°C. Avoid freeze / thaw cycles.

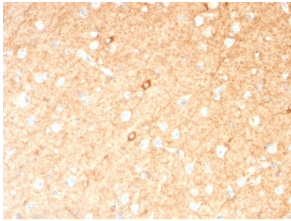
Anti-GAD67 Antibody [GAD1/2391] (A248674)

Specifications continued:

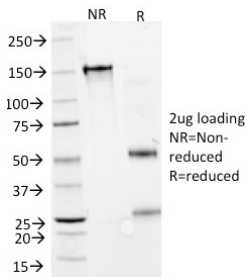
General Notes: This monoclonal antibody is also available in a different formulation without BSA and Sodium Azide - Anti-GAD67 Antibody [GAD1/2391] - BSA and Azide free (A251856).

Disclaimer: This product is for research use only. It is not intended for diagnostic or therapeutic use.

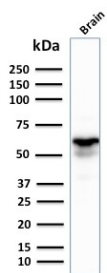
Images:



Immunohistochemical analysis of formalin-fixed, paraffin-embedded human brain using Anti-GAD67 Antibody [GAD1/2391].



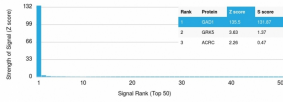
SDS-PAGE analysis of Anti-GAD67 Antibody [GAD1/2391] under non-reduced and reduced conditions; showing intact IgG and intact heavy and light chains, respectively. SDS-PAGE analysis confirms the integrity and purity of the antibody.



Western blot analysis of human brain tissue lysate using Anti-GAD67 Antibody [GAD1/2391].

Anti-GAD67 Antibody [GAD1/2391] (A248674)

Images continued:



Analysis of protein array containing more than 19,000 full-length human proteins using Anti-GAD67 Antibody [GAD1/2391]. Z-Score 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 (SD's) 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 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 be 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.