

# Product Datasheet

## **GAD1/GAD67 Antibody (GAD1/2563)** **NBP2-79803-100ug**

Unit Size: 100 ug

Store at 4C.

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**NBP2-79803-100ug**

GAD1/GAD67 Antibody (GAD1/2563)

Product Information	
Unit Size	100 ug
Concentration	0.2 mg/ml
Storage	Store at 4C.
Clonality	Monoclonal
Clone	GAD1/2563
Preservative	0.05% Sodium Azide
Isotype	IgG2b Kappa
Purity	Protein A or G purified
Buffer	10 mM PBS with 0.05% BSA
Target Molecular Weight	67 kDa

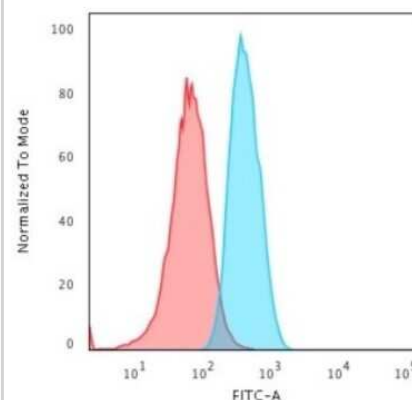
Product Description	
Description	<p>200ug/ml of antibody purified from Bioreactor Concentrate by Protein A or G. Prepared in 10 mM PBS with 0.05% BSA &amp; 0.05% azide. Also available WITHOUT BSA &amp; azide at 1.0 mg/ml. (NBP2-79937)</p> <p>Antibody with azide - store at 2 to 8C. Antibody without azide - store at -20 to -80C.</p>
Host	Mouse
Gene ID	2571
Gene Symbol	GAD1
Species	Human
Marker	GABAergic Neuronal Marker
Specificity/Sensitivity	<p>This monoclonal 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.</p>
Immunogen	Recombinant human GAD1/GAD67 protein fragment (around aa 72-135) (exact sequence is proprietary) (Uniprot: Q99259)

Product Application Details	
Applications	Western Blot, ELISA, Flow Cytometry, Protein Array
Recommended Dilutions	Western Blot 1-2 ug/ml, Flow Cytometry 1-2 ug/million cells, ELISA, Protein Array
Application Notes	ELISA: For coating, order antibody without BSA). Optimal dilution for a specific application should be determined.

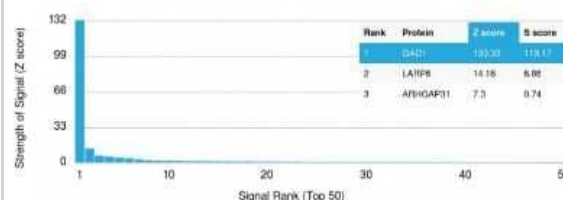


## Images

Flow Cytometry: GAD1/GAD67 Antibody (GAD1/2563) [NBP2-79803] - Flow Cytometric Analysis of T98G cells using GAD1/GAD67 Antibody (GAD1/2563) followed by Goat anti-Mouse IgG-CF488 (Blue); Isotype Control (Red).



Protein Array: GAD1/GAD67 Antibody (GAD1/2563) [NBP2-79803] - Analysis of Protein Array containing more than 19,000 full-length human proteins using GAD1/GAD67 Antibody (GAD1/2563) 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(TM) 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(TM) 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.





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### **Products Related to NBP2-79803-100ug**

HAF007	Goat anti-Mouse IgG Secondary Antibody [HRP]
NB720-B	Rabbit anti-Mouse IgG (H+L) Secondary Antibody [Biotin]
NBP1-43317-0.5mg	Mouse IgG2b Kappa Light Chain Isotype Control (MG2b)
NBP2-51849-0.1mg	Recombinant Human GAD1/GAD67 His Protein

### **Limitations**

This product is for research use only and is not approved for use in humans or in clinical diagnosis. Primary Antibodies are guaranteed for 1 year from date of receipt.

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