

# Product Datasheet

## **GAD1/GAD67 Antibody (GAD1/2563) [Janelia Fluor® 646] NBP2-79937JF646**

Unit Size: 0.1 ml

Store at 4C in the dark.

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**NBP2-79937JF646**

GAD1/GAD67 Antibody (GAD1/2563) [Janelia Fluor® 646]

Product Information	
Unit Size	0.1 ml
Concentration	Please see the vial label for concentration. If unlisted please contact technical services.
Storage	Store at 4C in the dark.
Clonality	Monoclonal
Clone	GAD1/2563
Preservative	0.05% Sodium Azide
Isotype	IgG2b Kappa
Conjugate	Janelia Fluor 646
Purity	Protein A or G purified
Buffer	50mM Sodium Borate

Product Description	
Host	Mouse
Gene ID	2571
Gene Symbol	GAD1
Species	Human
Marker	GABAergic Neuronal Marker
Specificity/Sensitivity	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.
Immunogen	Recombinant human GAD1/GAD67 protein fragment (around aa 72-135) (exact sequence is proprietary) (Uniprot: Q99259)
Notes	Sold under license from the Howard Hughes Medical Institute, Janelia Research Campus.

Product Application Details	
Applications	Western Blot, ELISA, Flow Cytometry, Protein Array, CyTOF-ready
Recommended Dilutions	Western Blot, Flow Cytometry, ELISA, Protein Array, CyTOF-ready
Application Notes	Optimal dilution of this antibody should be experimentally determined.



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### **Products Related to NBP2-79937JF646**

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NBP1-43317JF646	Mouse IgG2b Kappa Light Chain Isotype Control (MG2b) [Janelia Fluor 646]
NBP2-51849-0.1mg	Recombinant Human GAD1/GAD67 His Protein
DBD00	BDNF [HRP]
NBL1-10933	GAD1/GAD67 Overexpression Lysate

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### **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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