

# Product Datasheet

## **GAD1/GAD67 Antibody (GAD1/2391) [DyLight 680] NBP3-08276FR**

Unit Size: 100 ul

Store at 4C in the dark.

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**NBP3-08276FR**

GAD1/GAD67 Antibody (GAD1/2391) [DyLight 680]

| Product Information |                                                                                             |
|---------------------|---------------------------------------------------------------------------------------------|
| Unit Size           | 100 ul                                                                                      |
| Concentration       | Please see the vial label for concentration. If unlisted please contact technical services. |
| Storage             | Store at 4C in the dark.                                                                    |
| Clonality           | Monoclonal                                                                                  |
| Clone               | GAD1/2391                                                                                   |
| Preservative        | 0.05% Sodium Azide                                                                          |
| Isotype             | IgG1 Kappa                                                                                  |
| Conjugate           | DyLight 680                                                                                 |
| 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                   | DyLight (R) is a trademark of Thermo Fisher Scientific Inc. and its subsidiaries.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |

| Product Application Details |                                                                        |
|-----------------------------|------------------------------------------------------------------------|
| Applications                | Western Blot, ELISA, Immunohistochemistry-Paraffin, Protein Array      |
| Recommended Dilutions       | Western Blot, ELISA, Immunohistochemistry-Paraffin, Protein Array      |
| Application Notes           | Optimal dilution of this antibody should be experimentally determined. |





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### **Products Related to NBP3-08276FR**

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|                    |                                                             |
|--------------------|-------------------------------------------------------------|
| NBP1-43319FR-0.5ml | Mouse IgG1 Kappa Isotype Control (P3.6.2.8.1) [DyLight 680] |
| 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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