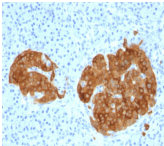


# GAD2 / GAD65 Monoclonal Mouse Antibody (GAD2/1960)



## Product Description

This MAb recognizes a protein of 65 kDa, which is identified as glutamic acid decarboxylase 2 (GAD2). It is responsible for catalyzing the production of gamma-aminobutyric acid from L-glutamic acid. There are two forms of glutamic acid decarboxylases (GAD s) that are found in the brain: GAD2 (also known as GAD65) and GAD1 (also known as GAD67). GAD1 and GAD2 are members of the group II decarboxylase family of proteins and are responsible for catalyzing the rate-limiting step in the production of GABA (γ-aminobutyric acid) from L-glutamic acid. Although both GAD s are found in the brain, GAD2 localizes to synaptic vesicle membranes in nerve terminals, while GAD1 is distributed throughout the cell. A pathogenic role for GAD2 is identified in the human pancreas since it has been identified as an autoantibody and an auto-reactive T cell target in insulin-dependent diabetes. Primary antibodies are available purified, or with a selection of fluorescent CF® dyes and other labels. CF® dyes offer exceptional brightness and photostability. See the [CF® Dye Brochure](#) for more information. Note: Conjugates of blue fluorescent dyes like CF®405S and CF®405M are not recommended for detecting low abundance targets, because blue dyes have lower fluorescence and can give higher non-specific background than other dye colors. **Stock status:** Because Biotium offers a large number of antibody and conjugation options, primary antibody conjugates may be made to order. Typical lead times are up to one week for CF® dye and biotin conjugates, and up to 2-3 weeks for fluorescent protein and enzyme conjugates. Please email [order@biotium.com](mailto:order@biotium.com) to inquire about stock status and lead times before placing your order.

Product attributes	
Antibody number	#1960
Antibody reactivity (target)	GAD2, GAD65
Antibody type	Primary
Host species	Mouse
Clonality	Monoclonal
Clone	GAD2/1960
Isotype	IgG2b, kappa
Molecular weight	65 kDa
Synonyms	DCE2; GAD2; Glutamic Acid Decarboxylase 2 (Pancreas); Glutamic Acid Decarboxylase 2 (Pancreatic Islets and Brain 65kDa); Glutamic Acid Decarboxylase 65 (GAD65)
Human gene symbol	GAD2
Entrez gene ID	2572
SwissProt	Q05329
Unigene	231829
Immunogen	Recombinant human GAD2 (GAD65) protein fragment (around aa 6-99) (exact sequence is proprietary)
Antibody target cellular localization	Cytoplasmic, Plasma membrane, Vesicular
Verified antibody applications	IHC (FFPE) (verified)
Species reactivity	Human
Positive control	Pancreas or Brain (IHC).
Shipping condition	Room temperature
Storage Conditions	Store at 2 to 8 °C. Protect fluorescent conjugates from light. Note: store BSA-free antibodies at -10 to -35 °C
Shelf life	Guaranteed for at least 24 months from date of receipt when stored as recommended
Regulatory status	For research use only (RUO)
Antibody/conjugate formulation	Conjugates: 0.1 mg/mL in PBS/0.1% BSA/0.05% azide, HRP conjugates: 0.1 mg/mL in PBS/0.05% BSA, Purified: 0.2 mg/mL in PBS/0.05% BSA/0.05% azide, Purified, BSA-free: 1 mg/mL in PBS without azide
Validated in protein array	Monospecific
Antibody research areas	Neuroscience
Cell/tissue expression	Brain