## GAD2 / GAD65 Monoclonal Mouse Antibody (GAD2/2362)



## **Product Description**

This MAb recognizes a protein of 65 kDa, which is identified as glutamic acid decarboxylase 2 (GDA2). 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 (-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 <a href="mailto:order@biotium.com">order@biotium.com</a> to inquire about stock status and lead times before placing your order.

Catalog number key for antibody number 2362, Anti-GAD2|GAD65 (GAD2/2362)

## Droduct attributes

Call us: 800-304-5357

Product attributes			
Antibody number	#2362		
Antibody reactivity (target)	GAD2, GAD65		
Antibody type	Primary		
Host species	Mouse		
Clonality	Monoclonal		
Clone	GAD2/2362		
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 fragment of human GAD2 (GAD65) protein (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.		
Shipping condition	Room temperature		
Storage Conditions	Store at 2 to 8 $^{\circ}$ C, Protect fluorescent conjugates from light, Note: store BSA-free antibodies at -10 to -35 $^{\circ}$ C		
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		
Shelf life	Guaranteed for at least 24 months from date of receipt when stored as recommended		
Product origin	Product may contain either bovine serum albumin (BSA) from bovine serum (Bos taurus), or recombinant BSA produced in Chinese hamster ovary cells. Inquire for the specific lot.		

Antibody # prefix	Conjugation	Ex/Em (nm)	Laser line	Detection channel	Dye Features
BNC04	CF®405S	404/431	405	DAPI (microscopy), AF405	CF®405S Features
BNC88	CF®488A	490/515	488	GFP, FITC	CF®488A Features
BNC68	CF®568	562/583	532, 561	RFP, TRITC	CF®568 Features
BNC94	CF®594	593/614	561	Texas Red®	CF®594 Features
BNC40	CF®640R	642/662	633-640	Cy®5	CF®640R Features
BNC47	CF®647	650/665	633-640	Cy®5	CF®647 Features
BNC74	CF®740	742/767	633-685	775/50	CF®740 Features
BNCB	Biotin	N/A	N/A	N/A	
BNUB	Purified	N/A	N/A	N/A	
BNUM	Purified, BSA-free	N/A	N/A	N/A	

Alexa Fluor, Pacific Blue, Pacific Orange, and Texas Red are trademarks or registered trademarks of Thermo Fisher Scientific; Cy is a registered trademark of Cytiva; IRDye, LI-COR, and Odyssey are registered trademarks of LI-COR Bioscience.

This datasheet was generated on December 13, 2025 at 02:44:31 AM. Visit product page to check for updated information before use. Product link: <a href="https://biotium.com/product/gad2-gad65-monoclonal-mouse-antibody-gad2-2362/">https://biotium.com/product/gad2-gad65-monoclonal-mouse-antibody-gad2-2362/</a>