

Mouse GAD2/GAD65 Monoclonal Antibody | anti-GAD2 antibody

GAD2/GAD65 (GABAergic Neuronal Marker)

CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA214650	Mouse	Human. Others not known.	Immunohistochemistry, Western Blot, ELISA

PRODUCT SYNONYMS

GAD2/GAD65; Monoclonal Antibody; GAD2/GAD65 (GABAergic Neuronal Marker); DCE2; GAD2; Glutamic Acid Decarboxylase 2 (Pancreas); Glutamic Acid Decarboxylase 2 (Pancreatic Islets and Brain 65kDa); Glutamic Acid Decarboxylase 65 (GAD65); anti-GAD2 antibody

PRODUCT SPECIFICATIONS

Host	Mouse
Reactivity	Human. Others not known.
Clonality	Monoclonal
Isotype	IgG2b, kappa
Clone Number	GAD2/1960
Specificity	This MAb recognizes a protein of 65kDa, 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 (gamma-aminobutyric acid) from L-glutamic acid. Although both GADs 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.
Form/Format	200ug/ml of Ab purified from Bioreactor Concentrate by Protein A/G. Prepared in 10mM PBS with 0.05% BSA & 0.05% azide. Also available WITHOUT BSA & azide at 1.0mg/ml.
Sequence Length	585
Applicable Applications for anti-GAD2 antibody	IHC (Immunohistochemistry), WB (Western Blot), ELISA
Immunogen	Recombinant human GAD2 (GAD65) protein fragment (around aa 6-99)
Cellular Localization	Cytoplasmic
Hu-chromosome Location	10p12.1
Positive Control	Pancreas or Brain.

IMAGES



Application Data

Analysis of Protein Array containing more than 19, 000 full-length human proteins using GAD2 (GAD65) Mouse Monoclonal Antibody (GAD2/1960) 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™ 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™ 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. For example, if a MAb binds to protein X with a Z-score of 43 and to protein Y with a Z-score of 14, then the S-score for the binding of that MAb to protein X is equal to 29.



SDS-PAGE

SDS-PAGE Analysis Purified GAD2 (GAD65) Mouse Monoclonal Antibody (GAD2/1960).Confirmation of Integrity and Purity of Antibody.



IHC (Immunohistochemistry)

Formalin-fixed, paraffin-embedded human Pancreas stained with GAD2 (GAD65) Mouse Monoclonal Antibody (GAD2/1960).

ADDITIONAL INFORMATION

References	Kaufman DL., et al. J Clin Invest. 1992 Jan; 89(1):283-92.
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NCBI AND UNIPROT INFORMATION

NCBI GI #	4503875
NCBI GeneID	2572
NCBI Accession #	NP_000809.1
NCBI GenBank Nucleotide #	NM_000818.2
UniProt Accession #	Q05329; Q9UD87
Molecular Weight	65kDa
NCBI Official Full Name	glutamate decarboxylase 2
NCBI Official Synonym Full Names	glutamate decarboxylase 2
NCBI Official Symbol	GAD2
NCBI Official Synonym Symbols	GAD65
NCBI Protein Information	glutamate decarboxylase 2
UniProt Protein Name	Glutamate decarboxylase 2
UniProt Gene Name	GAD2
UniProt Synonym Gene Names	GAD65; GAD-65

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