

GAD65 Mouse anti-Human Monoclonal (aa4-22) (N-GAD65) Antibody - LS-B9984 - LSBio	
CatalogID:	LS-B9984
Validation:	This antibody replaces catalog number LS-C188636. It has been validated for use in the following assays: IHC-P.
Target:	glutamate decarboxylase 2 (pancreatic islets and brain, 65kDa) (GAD2)
Synonyms:	GAD2 Antibody, GAD-65 Antibody, Glutamate decarboxylase 2 Antibody, GAD65 Antibody
Host	GAD2 antibody was produced in Mouse
Clonality:	Monoclonal
Isotype:	IgG1
Clone Name:	N-GAD65
Immunogen Species:	GAD65 antibody was raised against Human
Antigen Type:	Synthetic peptide
Immunogen:	GAD65 antibody was raised against keyhole Limpet Hemocyanin (KLH) conjugated synthetic peptide sequence PGSGFWSFGSEDGSGDSEN corresponding to amino acids 4-22 within the N-terminal region of human GAD65. Percent identity by BLAST analysis: Human, Chimpanzee, Gorilla, Orangutan (100%); Gibbon, Galago, Rat, Ferret, Panda, Bovine, Cat, Dog, Horse, Pig (95%); Monkey, Marmoset, Mouse, Rabbit, Opossum, Guinea pig (89%).
Specificity:	Specifically recognizes an epitope within the N-terminal (NT) region of Glutamate decarboxylase 2, otherwise known as GAD65/GAD2, an amphiphilic membrane- anchored protein and member of the group 2 decarboxylase family, principally expressed in the brain and also in pancreatic beta cells. GAD65 catalyzes the decarboxylation of glutamate to GABA, the major inhibitory neurotransmitter in the central nervous system. GAD65 is the 65kD isoform of GAD, encoded by the GAD2 gene, which is predominantly expressed by nerve termini, as oppose to the 67kD isoform (GAD67), which is predominantly found in the cell body, and is encoded by the GAD65 (GAD65Ab) in autoimmune diseases, including Graves disease and Stiff Man Syndrome (SMS), but GAD65Ab are most prevalent in patients with Type I diabetes mellitus, and those at high risk of developing Type I diabetes. The N-Terminal region of GAD65 lacks the epitopes for GAD65Ab in Type I diabetes patients, and has been shown as essential for targeting the enzyme to GABA-containing secretory vesicles. Clone N-GAD65 has been shown to be highly specific for GAD65 and does not recognize GAD67.
Epitope:	aa4-22
Reactivity:	Human, Monkey, Rat
Purification:	Protein G purified
Presentation:	PBS, 0.09% sodium azide
Recommended Storage:	+4°C or -20°C, Avoid repeated freezing and thawing.
Uses:	IHC - Paraffin (5 μ g/ml), Western blot (1:100 - 1:1000), Immunoprecipitation, Radioimmunoassay (Optimal dilution to be determined by the researcher)
Size:	50 µg

Concentration:	1 mg/ml
Immunohistochemistry Image:	
Human Brain, Cerebellum: Formalin-Fixed, Paraffin-Embedded (FFPE)	
Requested From:	Japan
Laboratory Reagent For In Vitro Research Use Only	
Not for resale without prior written consent from LifeSpan BioSciences, Inc.	
© 2014 LifeSpan BioSciences	