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# Datasheet for ABIN5518755 anti-GAD65 antibody (N-Term)

4 Images

1 Publication



#### Overview

Quantity:	100 µg
Target:	GAD65 (GAD2)
Binding Specificity:	AA 131-164, N-Term
Reactivity:	Human, Rat, Mouse
Host:	Rabbit
Clonality:	Polyclonal
Application:	Western Blotting (WB), Immunohistochemistry (Paraffin-embedded Sections) (IHC (p))
Product Details	
Purpose:	Rabbit IgG polyclonal antibody for Glutamate decarboxylase 2(GAD2) detection. Tested with WB, IHC-P in Human,Mouse,Rat.
Immunogen:	A synthetic peptide corresponding to a sequence at the N-terminus of human GAD65 (131- 164aa KVIDFHYPNELLQEYNWELADQPQNLEEILMHCQ), different from the related mouse and rat sequences by one amino acid.
Sequence:	KVIDFHYPNE LLQEYNWELA DQPQNLEEIL MHCQ
Isotype:	lgG
Cross-Reactivity (Details):	No cross reactivity with other proteins.
Characteristics:	Rabbit IgG polyclonal antibody for Glutamate decarboxylase 2(GAD2) detection. Tested with WB, IHC-P in Human,Mouse,Rat. Gene Name: glutamate decarboxylase 2 (pancreatic islets and brain, 65 kDa) Protein Name: Glutamate decarboxylase 2

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## Product Details

Purification:

Immunogen affinity purified.

## Target Details

Target:	GAD65 (GAD2)
Alternative Name:	GAD2 (GAD2 Products)
Background:	Glutamate decarboxylase 2, also known as GAD65, is an enzyme that in humans is encoded by
	the GAD2 gene. This gene encodes one of several forms of glutamic acid decarboxylase,
	identified as a major autoantigen in insulin-dependent diabetes. The enzyme encoded is
	responsible for catalyzing the production of gamma-aminobutyric acid from L-glutamic acid. A
	pathogenic role for this enzyme has been identified in the human pancreas since it has been
	identified as an autoantibody and an autoreactive T cell target in insulin-dependent diabetes.
	This gene may also play a role in the stiff man syndrome. Alternative splicing results in multiple
	transcript variants that encode the same protein.
	Synonyms: 4.1.1.15   65 kDa glutamic acid decarboxylase   DCE 2   DCE2   GAD 2   GAD 65
	GAD2   GAD-2   GAD65   GAD-65   Glutamate decarboxylase 2   Glutamate Decarboxylase 65
	Q05329
Gene ID:	2572
UniProt:	Q05329
Application Details	
Application Notes:	WB: Concentration: 0.1-0.5 µg/mL, Tested Species: Mouse, Rat, Predicted Species: Human
	IHC-P: Concentration: 0.5-1 $\mu$ g/mL, Tested Species: Human, Mouse, Rat, Epitope Retrieval by
	Heat: Boiling the paraffin sections in 10 mM citrate buffer, pH 6.0, for 20 mins is required for the
	staining of formalin/paraffin sections.
	Notes: Tested Species: Species with positive results. Predicted Species: Species predicted to be
	fit for the product based on sequence similarities. Other applications have not been tested.

Optimal dilutions should be determined by end users.

Comment:Antibody can be supported by chemiluminescence kit ABIN921124 in WB, supported by<br/>ABIN921231 in IHC(P).

Restrictions:

For Research Use only

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## Handling

Format:	Lyophilized
Reconstitution:	Add 0.2 mL of distilled water will yield a concentration of 500 $\mu$ g/mL.
Concentration:	500 µg/mL
Buffer:	Each vial contains 5 mg BSA, 0.9 mg NaCl, 0.2 mg Na2HPO4, 0.05 mg Sodium azide.
Preservative:	Sodium azide
Precaution of Use:	This product contains Sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.
Storage:	4 °C,-20 °C
Storage Comment:	At -20°C for one year. After reconstitution, at 4°C for one month. It can also be aliquotted and stored frozen at -20 °C for a longer time. Avoid repeated freezing and thawing.
Publications	
Product cited in:	Ozcan, Canpolat, Bulmus, Ulker, Tektemur, Tekin, Ozcan, Serhatlioglu, Kacar, Ayar, Kelestimur: " Agomelatine pretreatment prevents development of hyperglycemia and hypoinsulinemia in streptozotocin-induced diabetes in mice." in: <b>Fundamental &amp; clinical pharmacology</b> , Vol. 33, Issue 2, pp. 170-180, (2019) (PubMed).
	Pei, Yao, Jiang, Qiu, Wang, Yang, Gao, Wang, Yang, Liu, Liu, Jia, Tao, Wei, Sun: "Inorganic arsenic induces pyroptosis and pancreatic $\beta$ cells dysfunction through stimulating the IRE1 $\alpha$ /TNF- $\alpha$ pathway and protective effect of taurine." in: <b>Food and chemical toxicology : an international</b> <b>journal published for the British Industrial Biological Research Association</b> , Vol. 125, pp. 392- 402, (2019) (PubMed).
	Liu, Wang, Ma, Wen: "Hydroxytyrosol Improves Obesity and Insulin Resistance by Modulating Gut Microbiota in High-Fat Diet-Induced Obese Mice." in: <b>Frontiers in microbiology</b> , Vol. 10, pp. 390, (2019) (PubMed).
	Chin, Ng, Ng: "Moringa oleifera standardised aqueous leaf extract-loaded hydrocolloid film dressing: in vivo dermal safety and wound healing evaluation in STZ/HFD diabetic rat model." in: <b>Drug delivery and translational research</b> , (2018) (PubMed).
	Qasem, Noordin, Arya, Alsalahi, Jayash: "Evaluation of the glycemic effect of Ceratonia siliqua

pods (Carob) on a streptozotocin-nicotinamide induced diabetic rat model." in: **PeerJ**, Vol. 6, pp. e4788, (2018) (PubMed).

### Images



#### Immunohistochemistry

**Image 1.** GAD65 was detected in paraffin-embedded sections of human intetsinal cancer tissues using rabbit anti- GAD65 Antigen Affinity purified polyclonal antibody (Catalog #) at 1  $\mu$ g/mL. The immunohistochemical section was developed using SABC method (Catalog # SA1022).

#### Immunohistochemistry

**Image 2.** GAD65 was detected in paraffin-embedded sections of human mammary cancer tissues using rabbit anti- GAD65 Antigen Affinity purified polyclonal antibody (Catalog #) at 1  $\mu$ g/mL. The immunohistochemical section was developed using SABC method (Catalog # SA1022).

#### Immunohistochemistry

**Image 3.** GAD65 was detected in paraffin-embedded sections of rat kidney tissues using rabbit anti- GAD65 Antigen Affinity purified polyclonal antibody (Catalog #) at 1  $\mu$ g/mL. The immunohistochemical section was developed using SABC method (Catalog # SA1022).

Please check the product details page for more images. Overall 4 images are available for ABIN5518755.

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