

#3988 Store at -20C

GAD2 Antibody


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For Research Use Only. Not for Use in Diagnostic Procedures.

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|----------------------------|---------------------------|-----------------------------------|------------------------|--------------------------|-------------------------------|--------------------------------|
| Applications: WB | Reactivity: M R | Sensitivity: Endogenous | MW (kDa): 60 | Source: Rabbit | UniProt ID: #Q05329 | Entrez-Gene Id: 2572 |
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| Product Usage Information | Application Western Blotting | Dilution 1:1000 |
| Storage | Supplied in 10 mM sodium HEPES (pH 7.5), 150 mM NaCl, 100 µg/ml BSA and 50% glycerol. Store at –20°C. Do not aliquot the antibody. | |
| Specificity / Sensitivity | GAD2 Antibody detects endogenous levels of total GAD2 protein. | |
| Species predicted to react based on 100% sequence homology: | Human | |
| Source / Purification | Polyclonal antibodies are produced by immunizing animals with a synthetic peptide surrounding Ala150 of human GAD2. Antibodies are purified by peptide affinity chromatography. | |
| Background | The enzyme glutamate decarboxylase (GAD) is responsible for the synthesis of the essential neurotransmitter gamma-aminobutyric acid (GABA) from L-glutamic acid (1). GAD1 (GAD67) and GAD2 (GAD65) are expressed in nervous and endocrine systems (2) and are thought to be involved in synaptic transmission (3) and insulin secretion (4), respectively. Autoantibodies against GAD2 may serve as markers for type I diabetes (5). Many individuals suffering from an adult onset disorder known as Stiff Person Syndrome (SPS) also express autoantibodies to GAD2 (6). | |
| Background References | 1. Kaufman, D.L. et al. (1991) <i>J Neurochem</i> 56, 720-3. 2. Feldblum, S. et al. (1993) <i>J Neurosci Res</i> 34, 689-706. 3. Gao, B. and Moore, R.Y. (1996) <i>J Biol Rhythms</i> 11, 172-9. 4. Rubi, B. et al. (2001) <i>J Biol Chem</i> 276, 36391-6. 5. Gilliam, L.K. et al. (2004) <i>Clin Exp Immunol</i> 138, 337-41. 6. Skorstad, G. et al. (2008) <i>Eur J Neurol</i> 15, 973-80. | |

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| Species Reactivity | Species reactivity is determined by testing in at least one approved application (e.g., western blot). |
| Western Blot Buffer | IMPORTANT: For western blots, incubate membrane with diluted primary antibody in 5% w/v BSA, 1X TBS, 0.1% Tween® 20 at 4°C with gentle shaking, overnight. |
| Applications Key | WB: Western Blotting |
| Cross-Reactivity Key | H: human M: mouse R: rat Hm: hamster Mk: monkey Vir: virus Mi: mink C: chicken Dm: D. melanogaster X: Xenopus Z: zebrafish B: bovine Dg: dog Pg: pig Sc: S. cerevisiae Ce: C. elegans Hr: horse GP: Guinea Pig Rab: rabbit All: all species expected |
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