

## Product Datasheet

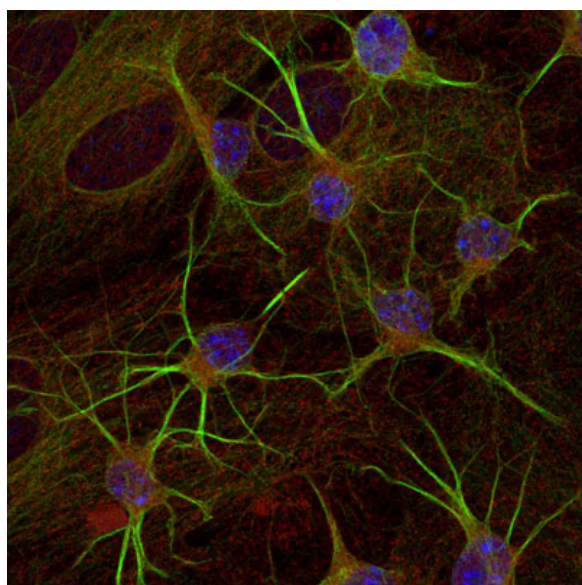
Chickens make *better* antibodies.

# Anti-Glutamic Acid Decarboxylase-67 (GAD 67) Antibody

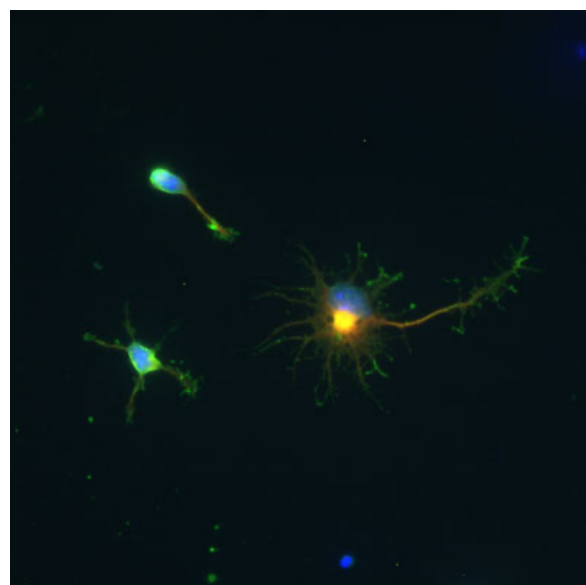
## Overview

<b>Catalog #</b>	GAD
<b>Concentration</b>	100 µg/mL
<b>Host Species</b>	Chicken Polyclonal
<b>Format</b>	Affinity-Purified IgY
<b>Buffer</b>	Phosphate-buffered (10 mM) isotonic (0.9%, w/v) saline ("PBS," pH 7.2) with sodium azide (0.02%, w/v) added as a preservative.
<b>Applications</b>	IHC 1:500-1:1000 ICC 1:500-1:1000 WB 1:1000-1:2000
<b>Species Reactivity</b>	Human, Mouse, and Rat
<b>Immunogen</b>	Synthetic peptide
<b>Molecular Weight</b>	67 kDa
<b>Cite this Antibody</b>	Aves Labs Cat# GAD, RRID: AB_2313545

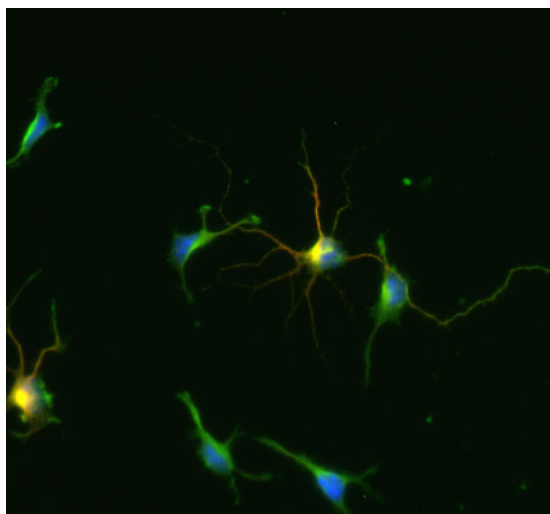
## Images



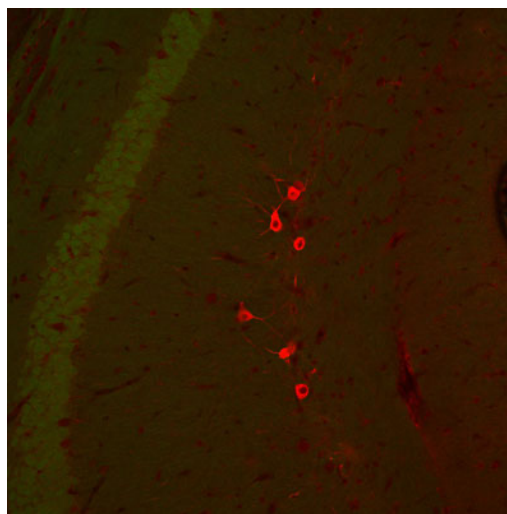
Sph21 neuroblastoma cells in culture. Fixed with 4% paraformaldehyde. GAD.1 (green, 1:1000 dilution) immunoreactivity. Phalloidin (F-actin) (red) staining. DAPI (blue) staining. Photomicrograph from Page Balich (Univ. Arizona).



Immunocytochemical staining of GAD-67 (red/yellow) in cultured cortical neurons from a neonatal mouse (C57/Black6). GAD staining was detected using Texas Red goat anti-chicken IgY (1:500). MAP2 staining (green) used a rabbit antibody (1:500). Hoda Ilias, Aves Labs.



Immunocytochemical staining of GAD-67 (red/yellow) in cultured cortical neurons from a neonatal mouse (C57/Black6). GAD staining was detected using Texas Red goat anti-chicken IgY (1:500). MAP2 staining (green) used a rabbit antibody (1:500). Hoda Ilias, Aves Labs.



Immunohistochemical staining of inhibitory neurons (red; 1:500) within the hippocampal formation of a transgenic, adult male Black6 mouse brain. The brains were fixed with 4.0% paraformaldehyde. The green staining is low level GFP fluorescence expressed off the actin promoter in this mouse transgenic strain. Secondary antibody (Texas Red goat anti-chicken IgY, (1:500).

## Details

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### Target Description

Human Glutamic Acid Decarboxylase (GAD-67), [EC 4.1.1.15] is a 66,987 dalton protein (594 amino acids) selectively expressed in a subpopulation of GABAergic neurons of the CNS. It catalyzes the decarboxylation of glutamic acid, forming the inhibitory neurotransmitter beta-amino butyric acid (GABA). It is also known as GAD-1.

### Purification Method

Chickens were immunized with a synthetic peptide / keyhole limpet hemocyanin (KLH) conjugate. This synthetic peptide corresponded to a region near the C-terminus of this gene product, and was 100% conserved between the human (Q99259, NCBI), mouse (P48318, NCBI) and rat (NP\_058703, NCBI) gene products. After repeated injections into the hens, immune eggs were collected, and the IgY fractions were purified from the yolks. These IgY fractions were then affinity purified using a peptide column, the concentrations of the eluate adjusted to 100 µg/mL, and the preparation was filter-sterilized through a 0.45 µm filter.

### Quality Control Tests

This antibody preparation was analyzed by immunohistochemistry (at a concentration of 1 µg/mL) using fluorescein-labeled goat anti-chicken IgY (1:500 dilution, Aves Labs Cat.# F-1005) as the secondary reagent.

### Storage

Store at 4°C in the dark. Under these conditions, the antibodies should have a shelf life of at least twelve months, provided they remain sterile. For longer term storage, aliquot and freeze to avoid freeze-thaw of the antibody.

## Our Guarantee

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As an original manufacturer, we are dedicated to creating quality and reproducible antibodies that further your research. We provide personalized customer support from the scientists that made the antibody and offer a free replacement or 100% refund if we cannot resolve an issue. Order today and experience how chickens make better antibodies.

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