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Product Datasheet

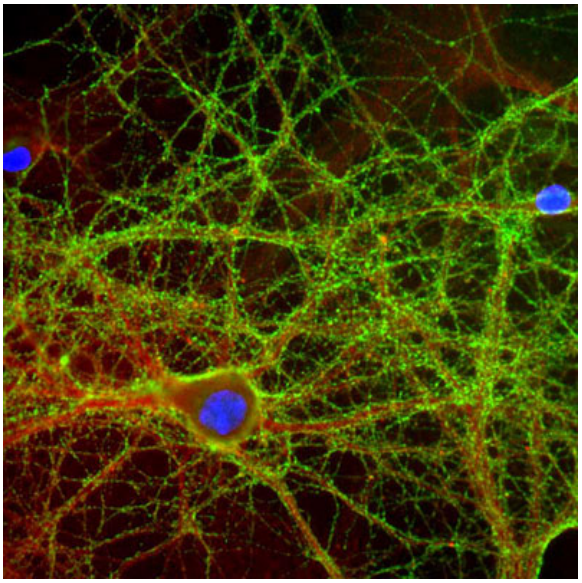
Chickens make *better* antibodies.

Anti-Growth-Associated Protein-43 (GAP-43) Antibody

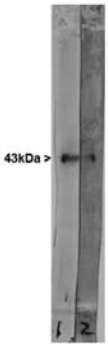
Overview

Catalog #	GAP43
Concentration	2 mg/mL
Host Species	Chicken Polyclonal
Format	IgY Fraction
Buffer	Phosphate-buffered (10 mM) isotonic (0.9%, w/v) saline ("PBS" pH 7.2) with bovine serum albumin (BSA, 0.5%) added to prevent absorption to the plastic and sodium azide (0.02%, w/v) added as a preservative
Applications	IHC 1:500-1:1000 ICC 1:500-1:1000 WB 1:1000-1:2000
Species Reactivity	Human, Mouse, and Rat
Immunogen	Synthetic peptide
Molecular Weight	43 kDa
Cite this Antibody	Aves Labs Cat# GAP43, RRID: AB_2313546

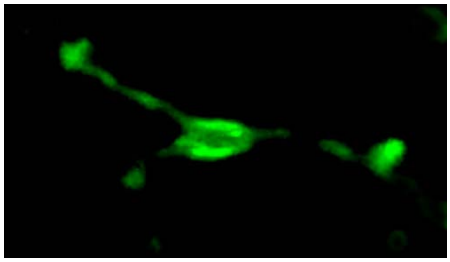
Images



Mixed neuron-glial cultures stained with CPCA-GAP43 (green) and rabbit antibody to alpha-II spectrin (RPCA-aII-Spec, red), and DNA (blue). The GAP43 antibody stains numerous axonal and dendritic profiles in these cultures, clearly revealing the submembraneous cytoskeleton and vesicles. Photo by Dr. Gerry Shaw, Univ. Florida.



Western blots of extract of cow hippocampus stained with CPCA-GAP43. A prominent band running at ~43 kDa represents GAP43. Photo courtesy of Dr. Gerry Shaw, Univ. Florida.



GAP-43 immunoreactivity in a neuroblast within a neurosphere culture. Chicken anti-GAP-43 antibody (1:500 dilution), Fluorescein-goat anti-chicken IgY secondary antibody (Aves Labs, 1:500). Photomicrograph by Hoda Ilias, Aves Labs.

Details

Target Description	Growth-Associated Protein-43 is a 274 amino acid cytoplasmic protein found in neurons and various other embryonic cell types. This protein also goes by a number of alternative names, including neuromodulin and F1. In cultured neurons, GAP-43 antibodies selectively stain the growth cones of axons. As the substrate for various phosphorylation events, it is believed that GAP-43 plays a critical role in axonal growth, although its exact function is still unclear.
Purification Method	Chickens were immunized with a synthetic peptide corresponding to the C-terminal region of mouse GAP-43 coupled to keyhole limpet hemocyanin. After repeated injections, immune eggs were collected, the IgY fractions were purified from the yolks, and the IgY concentration adjusted to 20 mg/mL. This preparation was then diluted 1:10 with PBS containing bovine serum albumin as a carrier. Finally, the antibody preparation was filter-sterilized.
Quality Control Tests	Quality assurance analysis was performed using immunohistochemistry (at a dilution of 1:1000) using fluorescein-labeled goat anti-chicken IgY (1:1000 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

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.