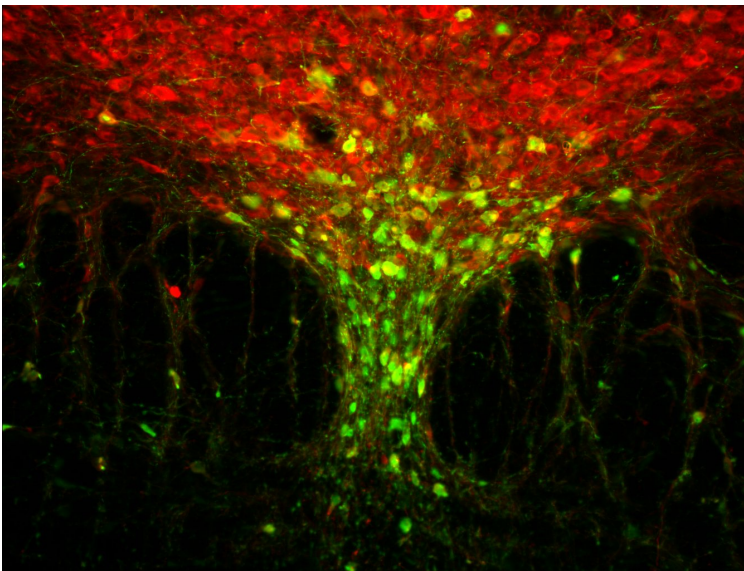
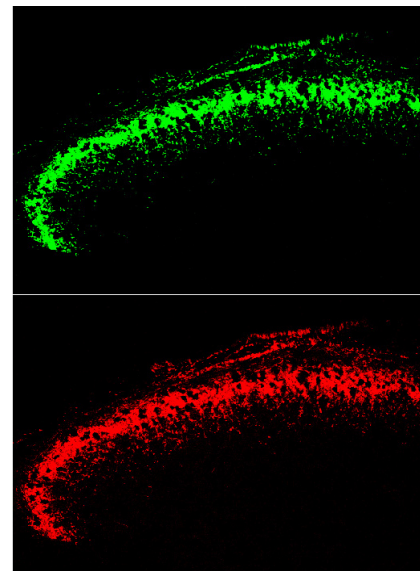


Product Datasheet**Chickens make *better* antibodies.****Anti-Green Fluorescent Protein (GFP) Antibody****Overview**

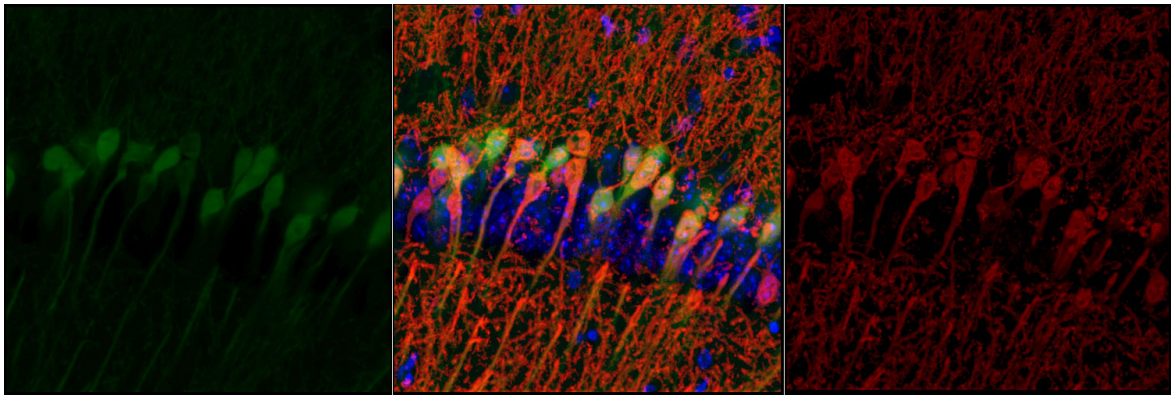
Catalog #	GFP-1010 (100 μ L size) or GFP-1020 (400 μ L size)
Concentration	10 mg/mL
Host Species	Chicken Polyclonal
Format	Mixture of IgY fraction and affinity-purified antibodies
Buffer	Sodium phosphate (10 mM, pH 7.2) buffered isotonic saline (0.9%, w/v), glycerol (50%, v/v), with sodium azide (0.02%, w/v) as an anti-microbial agent.
Applications	Flow, IHC 1:2000-1:5000 ICC 1:2000-1:5000 WB 1:5000-1:10000 ELISA
Species Reactivity	N/A
Immunogen	Recombinant GFP expressed in <i>Escherichia coli</i>
Molecular Weight	27 kDa
Cite this Antibody	Aves Labs Cat# GFP-1010, or Aves Labs Cat# GFP-1020; RRID: AB_2307313

Images

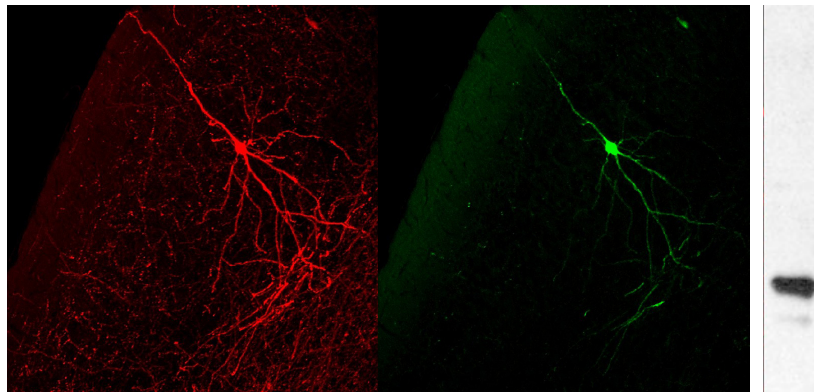
Staining of a tissue section through the midbrain region of an adult mouse for GFP (green) and Tryptophan Hydroxylase-positive neurons (red).



Comparison between GFP immunoreactivity in Rexed Lamina 2 neurons of a transgenic mouse using Aves Labs' anti-GFP (green) and rabbit anti-GFP (red). The transgenic mouse was generated by placing the GFP cDNA after a POMC gene promoter in the transfected plasmid. Mark Zilka, Univ. North Carolina.



Pyramidal neurons in the hippocampal formation of a neonatal mouse brain. Tissue was paraformaldehyde-fixed (4%) and paraffin-embedded. GFP staining is in green in left panel.



Comparison between GFP-immunoreactivity using Aves' anti-GFP antibody (left panel in red) and autofluorescence (right panel in green). In this case, the cortical neuron in this unfixed thick section was first photographed for GFP autofluorescence (left), and then the section was fixed (4% paraformaldehyde) and immunostained for GFP-immunoreactivity (1:1000 dilution) using Texas Red-goat anti-chicken IgY antibodies (Jackson ImmunoResearch) as a secondary. The same cell (left) was then identified. Far right: Western blot showing specific immunolabeling of the GFP protein.

Details

Target Description

Green Fluorescent Protein (GFP) is a naturally fluorescent protein originally derived from jellyfish. GFP has been engineered to produce a vast number of variously colored mutants, fusion proteins, and biosensors which have become useful and ubiquitous tools in transgenic experiments. Fluorescent proteins enable a wide range of applications where they have functioned as cell lineage tracers, reporters of gene expression, or as a measure of protein-protein interactions.

Purification Method

Chickens were immunized with recombinant green fluorescent protein (GFP) emulsified in Freund's adjuvant. After multiple injections, eggs were collected from the hens, IgY fractions were prepared from the yolks, and then affinity-purified antibodies were prepared using GFP conjugated to an agarose matrix. The final product is a mixture of both affinity-purified antibodies (30 $\mu\text{g}/\text{mL}$) and purified IgY (10 mg/mL), mixed with glycerol 1:1 (v/v) (to prevent freezing at -20°C), augmented with sodium azide and then filter-sterilized.

Quality Control Tests

Antibodies were analyzed by western blot analysis (1:5000 dilution) and immunohistochemistry (1:500 dilution) using transgenic mice expressing the GFP gene product. Western blots were performed using BlokHen® (Aves Labs) as the blocking reagent, and HRP-labeled goat anti-chicken antibodies (Aves Labs, Cat. #H-1004) as the detection reagent. Immunohistochemistry used tetramethyl rhodamine-labeled anti-chicken IgY.

Storage

Store at -20°C in the dark. Under these conditions, the antibodies should have a shelf life of at least twelve months, provided they remain sterile.

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.

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