

## Product Datasheet

Chickens make *better* antibodies.

# Anti-Nestin Antibody

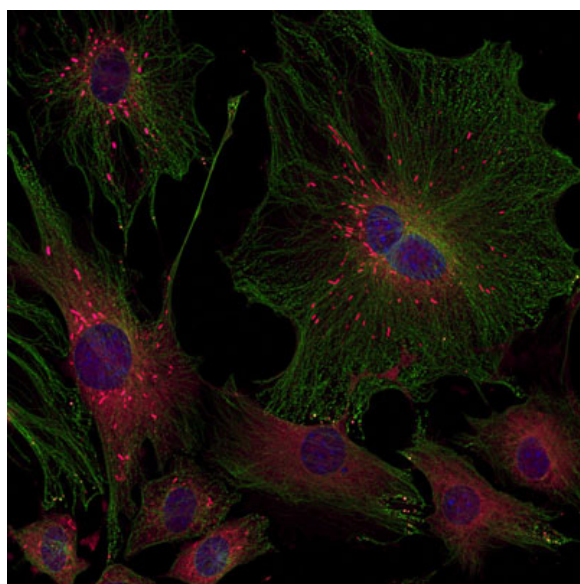
## Overview

---

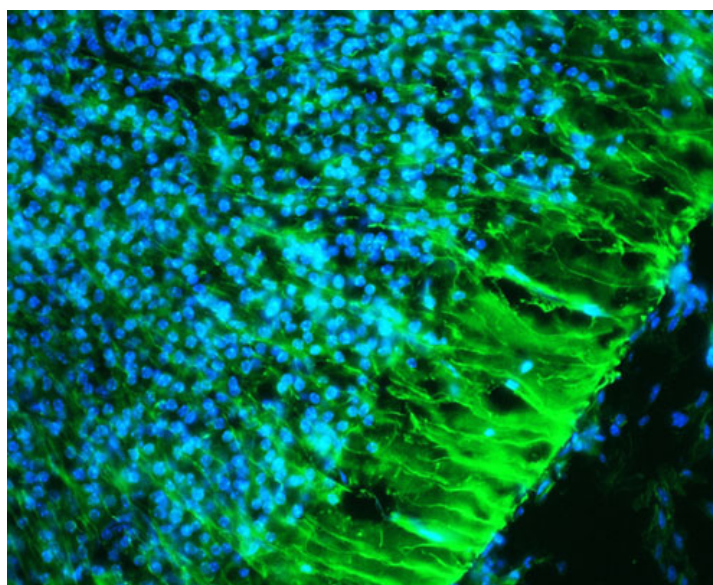
<b>Catalog #</b>	NES (1000 $\mu$ L size) or NES-0020 (100 $\mu$ L size)
<b>Concentration</b>	300 $\mu$ g/mL
<b>Host Species</b>	Chicken Polyclonal
<b>Format</b>	Affinity-Purified IgY
<b>Buffer</b>	Phosphate-buffered (10 mM) isotonic (0.9%, w/v) saline ("PBS," pH 7.2) with sodium azide (0.02%, w/v) added as a preservative.
<b>Applications</b>	IHC 1:1000-1:2000 ICC 1:1000-1:2000 WB 1:10000-1:20000
<b>Species Reactivity</b>	Mouse and Rat
<b>Immunogen</b>	Synthetic peptides
<b>Molecular Weight</b>	250 kDa
<b>Cite this Antibody</b>	Aves Labs Cat# NES, or Aves Labs Cat# NES-0020; RRID: AB_2314882

## Images

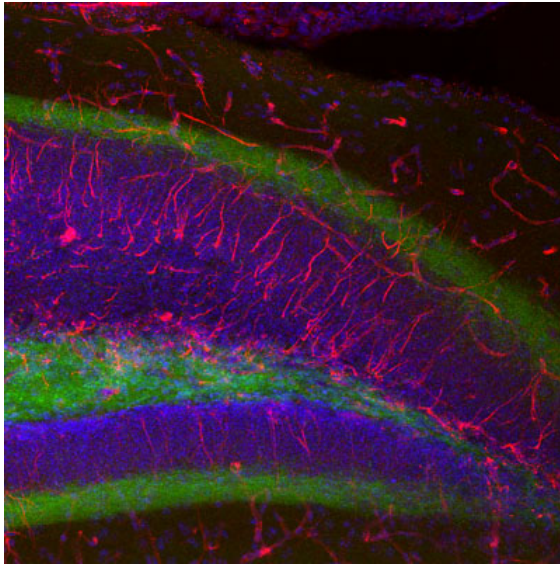
---



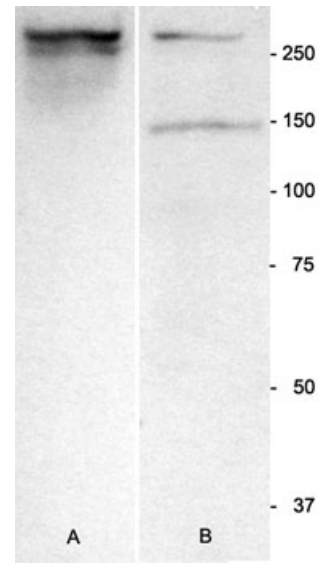
Photomicrograph of 3T3 cells in culture. Nestin immunoreactivity (red staining, 1:1000 dilution); green is  $\beta$ -Tubulin 3 staining using a rabbit antibody (1:500); blue is DAPI nuclear staining. Page Balich, Univ. Arizona.



Photomicrograph of a tissue section through the periventricular zone of an e16 mouse brain (4.0% paraformaldehyde-fixed). Green is nestin immunoreactivity (1:1000 dilution). Blue is DAPI nuclear staining. Hoda Ilias, Aves Labs.

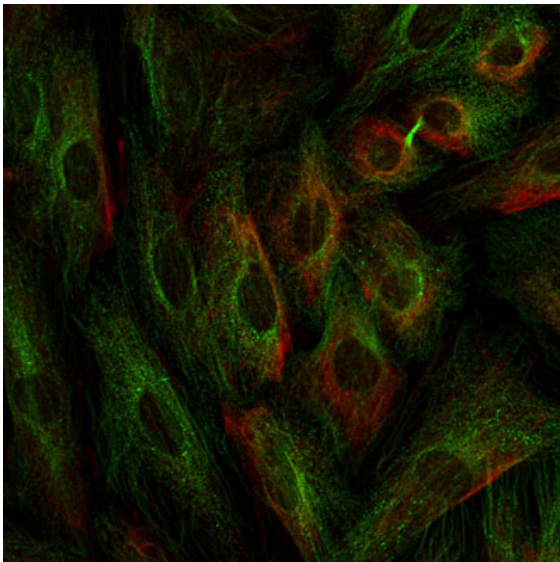


Photomicrograph of a paraffin-embedded tissue section through an adult dentate gyrus of the hippocampal formation from a paraformaldehyde-fixed (4%) mouse brain. Red shows nestin immunoreactivity (1:1000) as visualized with a Texas Red goat anti-chicken IgY antibody (Aves Labs, 1:500). Green is staining of the granule cells; blue is DAPI nuclear staining. Page Balich, Univ. Arizona.

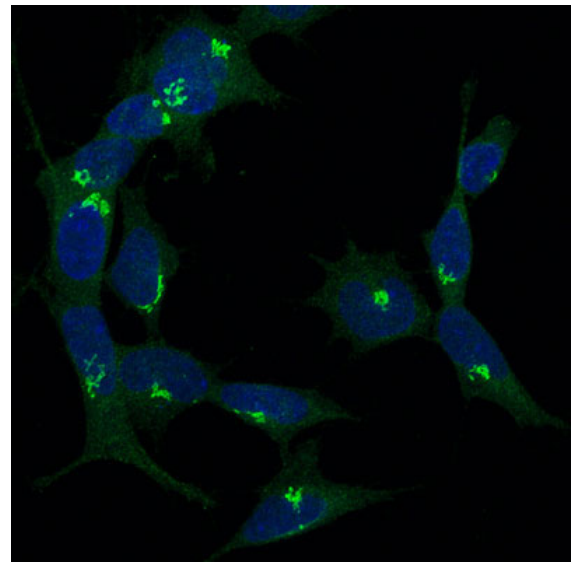


Nestin Western Blot. 20 ug of total protein from adult mouse brain in each lane. Lane A is Aves Labs' antibody (1:2000), showing a single, strong band at the correct molecular weight.

Lane B uses a rabbit antibody from BD Transduction Labs showing a weak band at the same molecular weight, as well as another spurious band at about 145 kDa. Hoda Ilias, Aves Labs.



Photomicrograph of A7r5 neuroblastoma cells in culture. Nestin immunoreactivity (red staining, Aves Labs, 1:1000 dilution); green is  $\beta$ -Tubulin 3 staining using a rabbit antibody (Rockland, 1:500 dilution); blue is DAPI nuclear staining. Page Balich, Univ. Arizona.



Immunocytochemistry showing nestin immunoreactivity (green; 1:1000 dilution) in A7r5 neuroblastoma cells in culture. Blue is DAPI nuclear staining. Page Balich, Univ. Arizona.

## Details

### Target Description

Mouse Nestin is a 206,994 dalton protein (1864 amino acids) expressed in neural crest cells, CNS neural stems cells, as well as a few non-neural cell types in the embryo, including cells within the pancreatic islets of Langerhans and the limb bud. Nestin is an intermediate filament-associated protein, and contributes to the cytoskeleton.

**Purification Method**

Chickens were immunized with three synthetic peptide / keyhole limpet hemocyanin (KLH) conjugates. These synthetic peptides corresponded to different regions of the mouse nestin gene product (NM\_NP\_057910), but are shared with the rat (NM\_012987, NCBI) protein sequence. After repeated injections, immune eggs were collected, and the IgY fractions were purified from the yolks. These IgY fractions were then affinity-purified using a peptide column, and the concentrations of the eluates adjusted to 300 µg/mL. Finally, equal volumes of each of the three affinity-purified anti-peptide antibodies were mixed, and the preparation was filter-sterilized.

**Quality Control Tests**

Each of the three antibodies were analyzed by immunohistochemistry (at a dilution of 1:20000) 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**

---

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.

**Note:** For research use only. Not intended for therapeutic or diagnostic use. Use of all products is subject to our terms and conditions, viewable on our website.