

## Product Datasheet

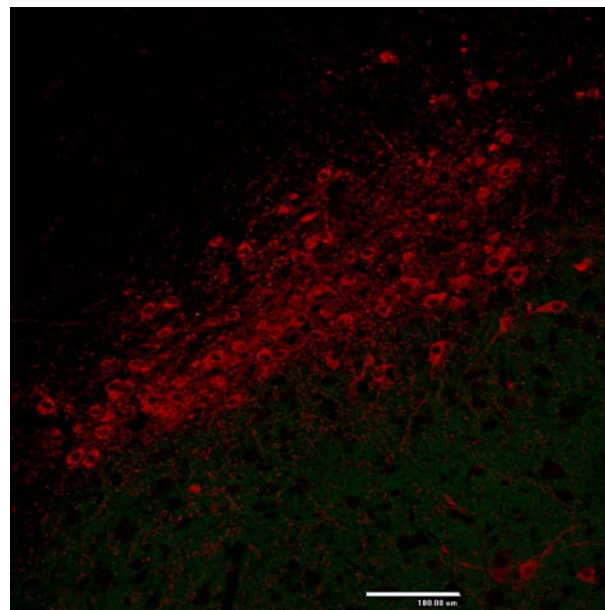
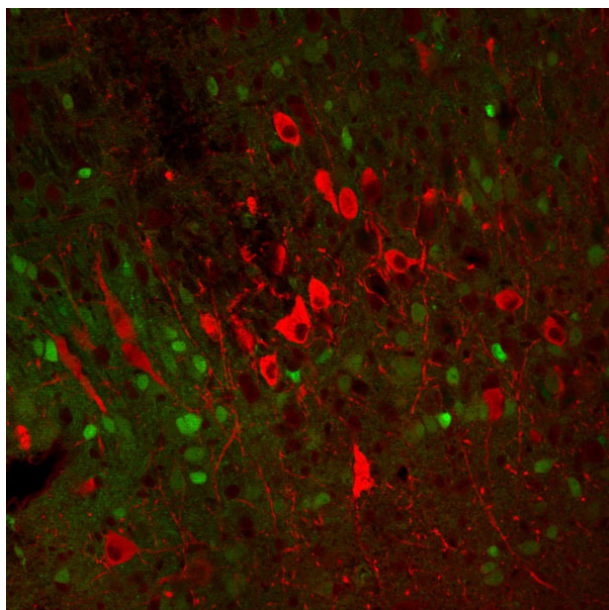
Chickens make *better* antibodies.

# Anti-Tyrosine Hydroxylase (TYH) Antibody

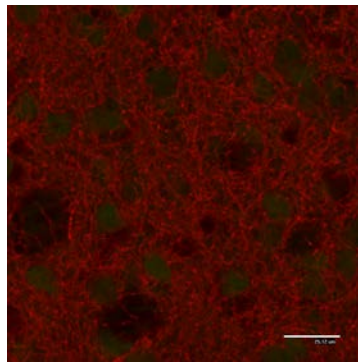
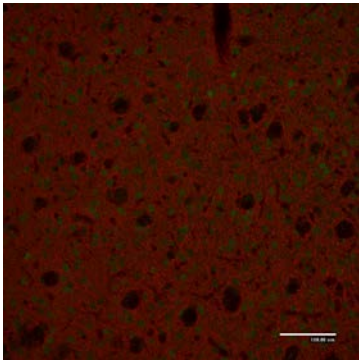
## Overview

<b>Catalog #</b>	TYH (1000 µL size) or TYH-0020 (100 µL size)
<b>Concentration</b>	200 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 1:1000-1:2000 ICC 1:1000-1:2000 WB 1:1000-1:2000
<b>Species Reactivity</b>	Human, Mouse, and Rat
<b>Immunogen</b>	Synthetic peptides
<b>Molecular Weight</b>	60 kDa
<b>Cite this Antibody</b>	Aves Labs Cat# TYH, or Aves Labs Cat# TYH-0020; RRID: AB_10013440

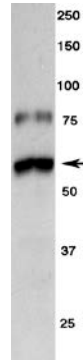
## Images



Immunostaining of paraformaldehyde-fixed (4%) paraffin-embedded sections of the substantia nigra pars compacta of an adult mouse brain. This mouse was engineered to have GFP expressed under control of the actin promoter, which explains the low-level green autofluorescence. Note the high number of dopaminergic neuron cell bodies in this brain region. Detection of the chicken antibody came from a Texas Red-labeled goat anti-chicken IgY, 1:500.



Immunostaining of paraformaldehyde-fixed (4%) paraffin-embedded sections of the caudate nucleus of an adult mouse brain. This mouse was engineered to have GFP expressed under control of the actin promoter, which explains the low-level green autofluorescence. Note the high number of dopaminergic fibers in this brain region. Detection of the chicken antibody came from a Texas Red-labeled goat anti-chicken IgY, 1:500.



Left: Immunostaining of unfixed, thick vibratome sections of adult rat brain Rostral Ventral Lateral Medulla (RVLM) with anti-TH antibody, 1:1000, followed by HRP-labeled goat anti-chicken IgY secondary antibody (Aves Labs, 1:1000 dilution). Right: Western blot showing specific immunolabeling of tyrosine hydroxylase.

## Details

### Target Description

Human TYH (EC 1.14.16.2) is a 58,523 dalton protein (528 amino acids) responsible for the enzymatic conversion of L-tyrosine to L-DOPA (dihydroxyphenylalanine). This enzyme is expressed in all catecholaminergic neurons of the CNS and PNS. In the CNS, TYH-positive neurons can be found within the substantia nigra, ventral tegmental area, locus ceruleus, and hypothalamus. In the PNS, TYH-positive neurons can be found within the sympathetic chain, pre-vertebral ganglia and the adrenal medulla.

### Purification Method

Chickens were immunized with two synthetic peptide / keyhole limpet hemocyanin (KLH) conjugates. These synthetic peptides corresponded to different regions of the Tyrosine Hydroxylase gene product, but were shared between the human (P07101, NCBI) and mouse (P24529, NCBI) sequences. After repeated injections into the hens, immune eggs were collected, and the IgY fractions were purified from the yolks. These IgY fractions were affinity purified using a peptide column, and the concentrations of the eluates adjusted to 200 µg/mL. Finally, equal volumes of both affinity-purified anti-peptide antibody preparations were mixed, and the preparation was filter-sterilized.

### Quality Control Tests

Both of the antibodies were analyzed by immunohistochemistry (at a concentration of 3 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

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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