

Product Datasheet

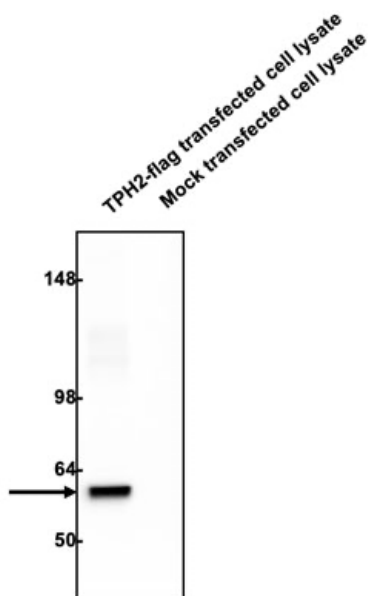
Chickens make *better* antibodies.

Anti-TPH2 Antibody

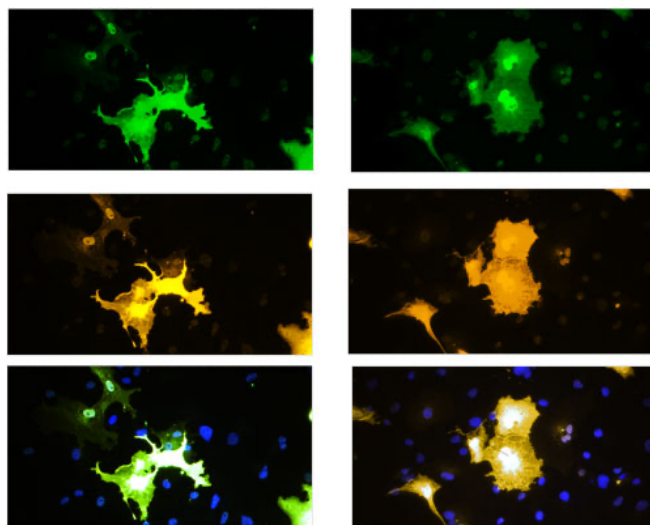
Overview

Catalog #	TPH2-0100 (500 μ L size) or TPH2-0020 (100 μ L size)
Concentration	0.2 mg/mL
Host Species	Chicken Polyclonal
Format	Affinity-Purified IgY
Buffer	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.
Applications	ICC 1:100-1:500 IHC 1:100-1:500 WB 1:500-1:1000
Species Reactivity	Human, Mouse, and Rat
Immunogen	Two synthetic peptides located near the C-terminus of TPH2
Molecular Weight	56 kDa
Cite this Antibody	Aves Labs Cat# TPH2-0100 or Aves Labs Cat# TPH2-0020; RRID: AB_3094926

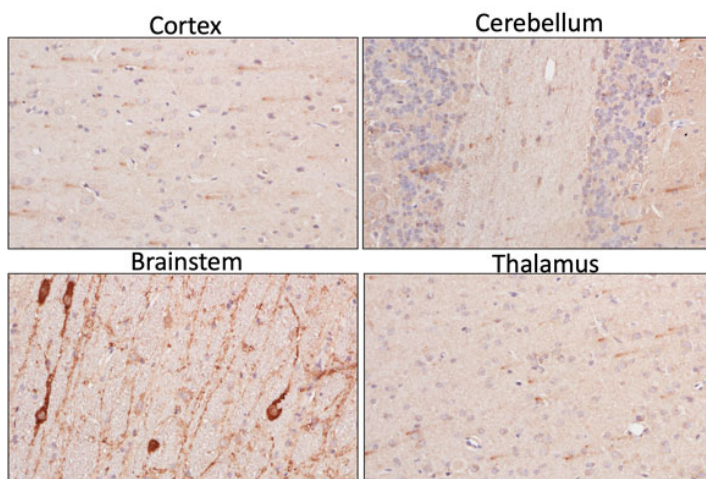
Images



Western blotting of TPH2-flag or mock transfected COS-7 cell lysates (10 μ g/ml) with Aves Labs chicken anti-TPH2 antibody (5 μ g/ml) and detected with anti-mouse HRP.



Immunofluorescence of COS-7 cells expressing TPH2-flag using Aves Labs chicken anti-TPH2 antibody (green) and rabbit anti-flag antibody (red). Blue is DAPI nuclear stain showing nuclei of both transfected and untransfected cells. Staining shows 100% correspondence between chicken anti-TPH2 signal and anti-flag in transfected cells.



Section of formalin fixed, paraffin-embedded rat brain showing staining of TPH2. Sections were stained with Aves Labs anti-TPH2 antibody at 1:200 dilution and detected with anti-chicken HRP.

Details

Target Description

Tryptophan hydroxylase 2 (TPH2) is an enzyme involved in the biosynthesis of serotonin, a neurotransmitter that plays a crucial role in regulating mood, appetite, and sleep. TPH2 specifically catalyzes the conversion of tryptophan to 5-hydroxytryptophan (5-HTP), a precursor to serotonin. Unlike its counterpart TPH1, which is primarily found in the periphery, TPH2 is predominantly expressed in the central nervous system, particularly in the raphe nuclei of the brainstem. The genetic regulation and expression of TPH2 have been extensively studied in the context of various psychiatric disorders, including depression and anxiety. Research on TPH2 aids in the development of targeted therapeutic interventions focusing on modulating serotonin levels in the brain. Recent studies have shown TPH2 acting in a sex-dependent manner for body processes such as energy balance (Liu et al. *Endocrinology*, 2021) and anxiety behaviors (Li et al. *Neuropharmacology*, 2022).

Purification Method

Eggs from hens hyperimmunized with target were used to prepare an IgY fraction which was then subjected to antigen-specific affinity purification.

Quality Control Tests

Each new lot of this antibody is tested in WB to confirm that it recognizes a single immunoreactive band of expected molecular weight when used to probe brain lysate.

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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