

Product Datasheet

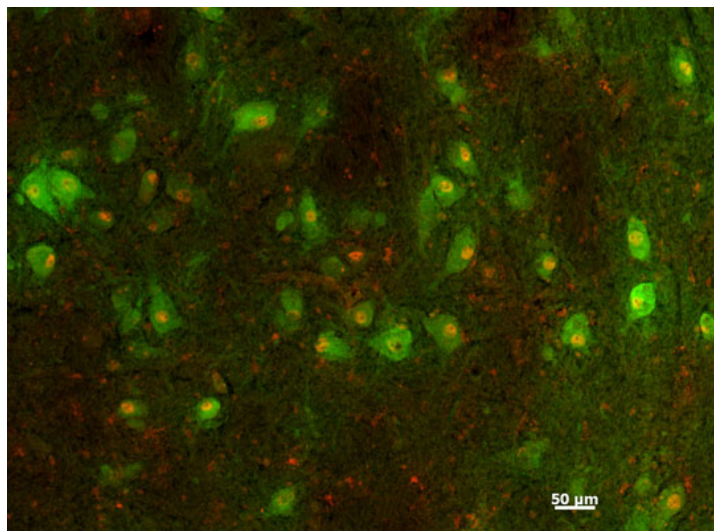
Chickens make *better* antibodies.

Anti-Tyrosine Hydroxylase Antibody

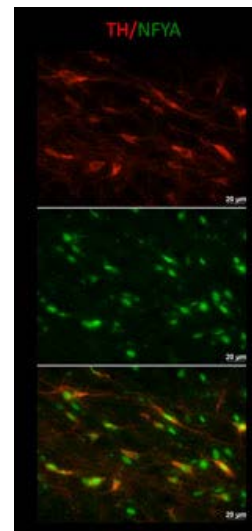
Overview

Catalog #	LNC1-P (100 μ L size) or LNC1-PS (20 μ L size)
Concentration	1 mg/mL
Host Species	Mouse Monoclonal
Format	Purified
Buffer	10 mM Tris, 50 mM Sodium Chloride, 0.065% Sodium Azide pH 7.4
Applications	IHC 1:1000 ICC 1:500-1:1000 WB 1:1000 IP
Species Reactivity	Chicken, Frog, Human, Lizard, Monkey, Mouse, Rat, Vole, and Zebrafish
Immunogen	Tyrosine Hydroxylase purified from PC12 cells
Molecular Weight	59-63 kDa
Cite this Antibody	Aves Labs Cat# LNC1-P, or Aves Labs Cat# LNC1-PS; RRID: AB_2201528

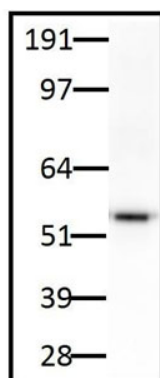
Images



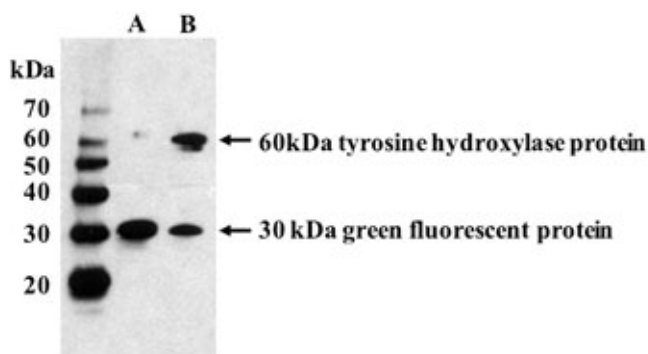
Double-labeled fluorescence immunohistochemistry of human midbrain dopamine neurons stained green with LNC1 and red with PitX.



Mouse brain midbrain dopamine neurons in the substantia nigra double-labeled with LNC1 for tyrosine hydroxylase (TH, red and cytoplasmic) and a rabbit antibody to Nuclear Factor Y subunit A (NFYA, green and primarily nuclear).



LNC1 anti-TH monoclonal antibody was used at 2.5 ug/mL to stain endogenous tyrosine hydroxylase in rat brain lysate.



In lane A, HEK293 cells were transfected to express only Green Fluorescent Protein (GFP). In lane B, HEK293 cells were transfected to express both GFP and human Tyrosine Hydroxylase (TH) isoform 2. The specificity of LNC1 is demonstrated by the 60 kDa TH protein band observed in lane B but not in lane A. In contrast, the 30 kDa GFP band is found in both lanes A and B.

Details

Target Description

Tyrosine Hydroxylase (TH) is the rate-limiting enzyme in the synthesis of the catecholamine neurotransmitters dopamine, epinephrine, and norepinephrine and is responsible for converting L-tyrosine to L-dopa. Synthesis of catecholamines is regulated by the interaction of TH with its cofactor, tetrahydrobiopterin (BH4), and the substrates L-tyrosine and molecular oxygen. In humans, four TH mRNA splice variants (hTH1-hTH4) have been isolated, while subprimate species rely on a single form of TH. It is known that the hTH1-hTH4 variants are identical in their catalytic domain but differ in their N-terminal regulatory domains. Importantly, LNC1 reacts with the catalytic domain of TH and thus with all four isoforms of human TH. The role of TH in the synthesis of catecholamine neurotransmitters suggests a connection between the enzyme and a number of neuropathogenic diseases characterized by irregular catecholamine levels, such as Parkinson's disease, schizophrenia, and dystonia, as well as a variety of cardiovascular diseases.

Purification Method

Purified by Protein A chromatography

Quality Control Tests

Western blots performed on each lot.

Storage

Aliquot and store at -20 degrees celcius. Stable for 2 years after opening when stored as described.

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.