www.antibodiesinc.com
orders@antibodiesinc.com
530-758-4400

Product Datasheet

Anti-Tyrosine Hydroxylase Antibody (Purified) FL594 Conjugate

Overview

Catalog #	77-700-FL594
Conjugate	FL594 Ex: 594 nm, Em: 615 nm
Isotype	IgG1
Clone Number	LNC1
Size	200 µL
Concentration	0.5 mg/mL
Host Species	Mouse Monoclonal
Format	Purified by Protein A chromatography
Buffer	PBS with 0.09% azide
Applications	ICC, IHC
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	Antibodies Inc Cat# 77-700-FL594, RRID: AB_2940722

Details

Target Description

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.

Specificity

Recognizes an epitope outside of the regulatory N-terminus. Recognizes a protein of approximately 59-61 kDa by Western blot. Does not react with the following on Western Blots: purified dopamine-beta-hydroxylase, phenylalanine hydroxylase, trytophan hydroxylase, dehydropteridine reductase, sepiapterin reductase or phenethanolamine-N-methyl transferase (PNMT). Identifies a single ~60 kDa band on Western Blots of HeLa cells transfected to express human tyrosine hydroxylase.

Purification Method	Produced by in vitro bioreactor culture of hybridoma line followed by Protein A affinity chromatography and conjugation of purified mAb. Purified mAbs are >90% specific antibody.
Quality Control Tests	Each new lot of this antibody is tested to confirm that it recognizes a single immunoreactive band of expected molecular weight when used to probe rat brain lysate.
Storage	Aliquot and store at ≤ -20°C for long term storage. For short term storage, store at 2-8°C. For maximum recovery of product, centrifuge the vial prior to removing the cap.

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 our 50+ year passion for science.