

## Basic Information

<b>Product Name</b>	Anti-TH Antibody
<b>Gene Name</b>	TH
<b>Source</b>	Rabbit
<b>Clonality</b>	Polyclonal
<b>Isotype</b>	IgG
<b>Species Reactivity</b>	human, mouse, rat
<b>Tested Application</b>	WB, IHC, IF
<b>Contents</b>	500 ug/ml antibody with PBS, 0.02% NaN3, 1 mg/ml BSA and 50% glycerol.
<b>Immunogen</b>	A synthetic peptide corresponding to a sequence in the middle region of human Tyrosine Hydroxylase, identical to the related mouse and rat sequences.
<b>Concentration</b>	500 ug/ml
<b>Purification</b>	Immunogen affinity purified.
<b>Observed MW</b>	59 kDa
<b>Dilution Ratios</b>	Western blot (WB): 1:500-2000 Immunohistochemistry (IHC): 1:50-400 Immunofluorescence (IF): 1:50-400 (Boiling the paraffin sections in 10mM citrate buffer,pH6.0,or PH8.0 EDTA repair liquid for 20 mins is required for the staining of formalin/paraffin sections.) Optimal working dilutions must be determined by end user.

## Storage

12 months from date of receipt, -20°C as supplied.

## Background Information

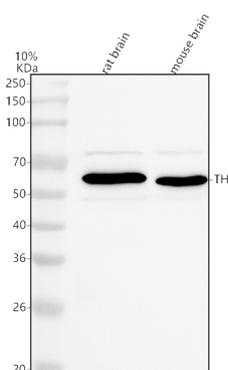
TH is equal to tyrosine hydroxylase. The protein encoded by this gene is involved in the conversion of tyrosine to dopamine. It is the rate-limiting enzyme in the synthesis of catecholamines, hence plays a key role in the physiology of adrenergic neurons. Mutations in this gene have been associated with autosomal recessive Segawa syndrome. Alternatively spliced transcript variants encoding different isoforms have been noted for this gene. In humans, tyrosine hydroxylase is encoded by the TH gene, and the enzyme is present in the central nervous system (CNS), peripheral sympathetic neurons and the adrenal medulla. Tyrosine hydroxylase, phenylalanine hydroxylase and tryptophan

hydroxylase together make up the family of aromatic amino acid hydroxylases (AAAHs).

## Reference

Anti-TH Antibody被引用在29文献中。

## Selected Validation Data



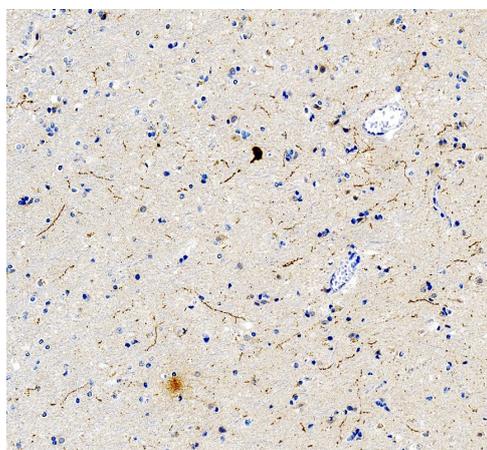
Western blot analysis of TH using anti-TH antibody (PB9449). The sample well of each lane was loaded with 30 ug of sample under reducing conditions.

Lane 1: rat brain tissue lysates,

Lane 2: mouse brain tissue lysates.

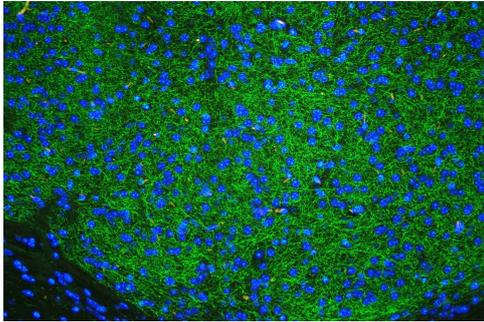
After electrophoresis, proteins were transferred to a membrane.

Then the membrane was incubated with rabbit anti-TH antigen affinity purified polyclonal antibody (PB9449) at a dilution of 1:1000 and probed with a goat anti-rabbit IgG-HRP secondary antibody (Catalog # BA1054). The signal is developed using ECL Plus Western Blotting Substrate (Catalog # AR1197). A specific band was detected for TH at approximately 59 kDa. The expected band size for TH is at 59 kDa.



IHC analysis of TH using anti-TH antibody (PB9449).

TH was detected in a paraffin-embedded section of human brain tissue. Biotinylated goat anti-rabbit IgG was used as secondary antibody. The tissue section was incubated with rabbit anti-TH Antibody (PB9449) at a dilution of 1:200 and developed using Streptavidin-Biotin-Complex (SABC) (Catalog # SA1022) with DAB (Catalog # AR1027) as the chromogen.



IF analysis using anti- TH antibody (PB9449).detected in paraffin-embedded section of mouse brain tissue . The tissue section were stained using the Fluoro488-conjugated Anti-rabbit IgG Secondary Antibody (green) (Catalog # BA1127) and counterstained with DAPI (blue).