

## Basic Information

<b>Product Name</b>	Anti-TH Antibody (Clone#TH-16)	
<b>Gene Name</b>	TH	
<b>Source</b>	Mouse	
<b>Clonality</b>	Monoclonal	
<b>Isotype</b>	IgG1	
<b>Species Reactivity</b>	human, mouse, rat, rabbit	
<b>Tested Application</b>	IHC, WB	
<b>Contents</b>	200 ug/ml antibody with PBS , 0.02% NaN <sub>3</sub> , 1mg BSA and 50% glycerol.	
<b>Immunogen</b>	Rat tyrosine hydroxylase(TH).	
<b>Concentration</b>	200 ug/ml	
<b>Purification</b>	Ascites	
<b>Observed MW</b>	59 kDa	
<b>Dilution Ratios</b>	Western blot (WB):	1:500-2000
	Immunohistochemistry (IHC):	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.

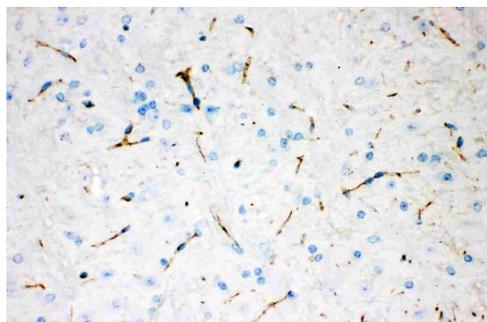
## Background Information

Tyrosine hydroxylase is involved in the conversion of phenylalanine to dopamine. As the rate-limiting enzyme in the synthesis of catecholamines, tyrosine hydroxylase has a key role in the physiology of adrenergic neurons. Human TH gene contains 13 primary exons and spans approximately 8 kb. TH is in the 11p15.5 region.

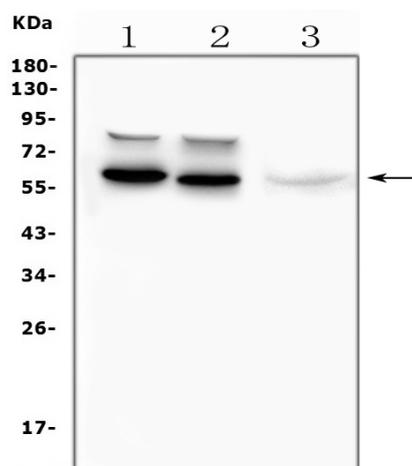
## Reference

Anti-TH Antibody (Clone#TH-16)被引用在7文献中。

## Selected Validation Data



IHC analysis of Tyrosine Hydroxylase using anti- Tyrosine Hydroxylase antibody (BM1609). Tyrosine Hydroxylase was detected in paraffin-embedded section of rat brain tissues. Heat mediated antigen retrieval was performed in citrate buffer (pH6, epitope retrieval solution) for 20 mins. The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 1 $\mu$ g/ml mouse anti- Tyrosine Hydroxylase Antibody (BM1609) overnight at 4 $^{\circ}$ C. Biotinylated goat anti-mouse IgG was used as secondary antibody and incubated for 30 minutes at 37 $^{\circ}$ C. The tissue section was developed using Streptavidin-Biotin-Complex (SABC)(Catalog # SA1021) with DAB as the chromogen.



Western blot analysis of Tyrosine Hydroxylase using anti-Tyrosine Hydroxylase antibody (BM1609).

Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel) / 90V (Resolving gel) for 2-3 hours. The sample well of each lane was loaded with 50 $\mu$ g of sample under reducing conditions.

Lane 1: rat brain tissue lysate,

Lane 2: mouse brain tissue lysate,

Lane 3: human U-87MG cell lysate.

After Electrophoresis, proteins were transferred to a Nitrocellulose membrane at 150mA for 50-90 minutes. Blocked the membrane with 5% Non-fat Milk/ TBS for 1.5 hour at RT. The membrane was incubated with mouse anti-Tyrosine Hydroxylase antigen affinity purified monoclonal antibody (Catalog # BM1609) at 0.5  $\mu$ g/mL overnight at 4 $^{\circ}$ C, then washed with TBS-0.1%Tween 3 times with 5 minutes each and probed with a goat anti-mouse IgG-HRP secondary antibody at a dilution of 1:10000 for 1.5 hour at RT. The signal is developed using an Enhanced Chemiluminescent detection (ECL) kit (Catalog # EK1001) with Tanon 5200 system. A specific band was detected for Tyrosine Hydroxylase at approximately 59KD. The expected band size for Tyrosine Hydroxylase is at 59KD.