

Anti-Tyrosine Hydroxylase Antibody (Monoclonal, TH-16)

Catalog Number: MA1100

About Th

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.

Overview

Product Name	Anti-Tyrosine Hydroxylase Antibody (Monoclonal, TH-16)
Reactive Species	Human, Mouse, Rabbit, Rat
Description	Boster Bio Anti-Tyrosine Hydroxylase Antibody (Monoclonal, TH-16) catalog # MA1100. Tested in IHC, WB applications. This antibody reacts with Human, Mouse, Rabbit, Rat.
Application	IHC, WB
Clonality	Monoclonal TH-16
Formulation	Mouse ascites fluid, 1.2% sodium acetate, 2mg BSA, with 0.01mg NaN ₃ as preservative.
Storage Instructions	Store at -20°C for one year from date of receipt. After reconstitution, at 4°C for one month. It can also be aliquotted and stored frozen at -20°C for six months. Avoid repeated freeze-thaw cycles.
Host	Mouse
Uniprot ID	P04177

Technical Details

Immunogen	Rat tyrosine hydroxylase (TH).
Recommended Detection Systems	Boster recommends Enhanced Chemiluminescent Kit with anti-Mouse IgG (EK1001) for Western blot, and HRP Conjugated anti-Mouse IgG Super Vision Assay Kit (SV0001-1) for IHC(P) and IHC(F).
Cross Reactivity	No cross-reactivity with other proteins
Isotype	Mouse IgG1
Form	Lyophilized
Concentration	Adding 1 ml of PBS buffer will yield a concentration of 100 ug/ml.
Purification	Ascites
Suggested Dilutions	Immunohistochemistry (Paraffin-embedded Section), 0.5-1ug/ml, Human, rat, rabbit, By Heat Immunohistochemistry (Frozen Section), 0.5-1ug/ml, Human, rat, rabbit, -

Western blot, 0.25-0.5ug/ml, Human, mouse, rat, rabbit

Anti-Tyrosine Hydroxylase Antibody (Monoclonal, TH-16) (MA1100) Images

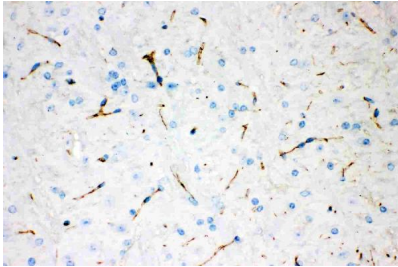


Figure 1. IHC analysis of Tyrosine Hydroxylase using anti-Tyrosine Hydroxylase antibody (MA1100).

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 1ug/ml mouse anti-Tyrosine Hydroxylase Antibody (MA1100) overnight at 4°C. Biotinylated goat anti-mouse IgG was used as secondary antibody and incubated for 30 minutes at 37°C. The tissue section was developed using Streptavidin-Biotin-Complex (SABC)(Catalog # SA1021) with DAB as the chromogen.

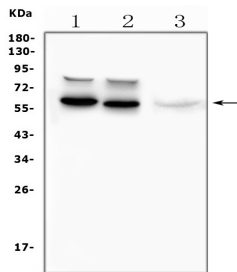


Figure 2. Western blot analysis of Tyrosine Hydroxylase using anti-Tyrosine Hydroxylase antibody (MA1100).

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 50ug 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 # MA1100) at 0.5 ug/mL overnight at 4°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.

15 Publications Citing This Product

1. PubMed ID: 31217864, Liu Y,Li L,Qiu M,Tan L,Zhang M,Li J,Zhu H,Jiang S,Su X,Li A.Renal and cerebral RAS interaction contributes to diabetic kidney disease.Am J Transl Res.2019 May 15;11(5):2925-2939.PMID:31217864;PMCID:PMC6556645.
2. PubMed ID: -, NPPB prevents postoperative peritoneal adhesion formation by blocking volume-activated Cl⁻ current. Changqing Zhou,Shanshan Li,Min Wang,Zhongmei Chen,Guoguang Peng
3. PubMed ID: 32174219, He X,Liu Z,Pang Y,Xu W,Zhao L,Li H.Downregulation of transcription factor TCTP elevates microRNA-200a expression to restrain Myt1L expression, thereby improving neurobehavior and oxidative stress injury in cerebral palsy rats.Cell Cycle.2020 Apr;19(8):855

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