Anti-Tyrosine Hydroxylase Antibody

R1706-18

Product Type:	Rabbit polyclonal IgG, primary antibodies
Species reactivity:	Human, Mouse, Rat
Applications:	WB, IF-Cell, IHC-P, FC
Molecular Wt:	Predicted band size: 58 kDa

Description: The enzyme tyrosine hydroxylase (TH), also designated tyrosine 3-monooxygenase (TY3H), catalyzes the conversion of tyrosine to L-dopa, which is the rate limiting step in the biosynthesis of catecholamines such as dopamine, adrenalin and noradrenalin. TH is thought to play a role in the pathogenesis of Parkinson's disease, which is associated with reduced dopamine levels. Two transcription factor binding sites in the proximal region of the TH gene, the TPA-responsive element (TRE) and the c-AMP responsive element (CRE), have been implicated in the complex regulation of the TH gene. TH is also known to be upregulated by the glia maturation factor (GMF), a Cdc 10/SWI6 motif-containing protein called V-1, and a variety of additional compounds.

Immunogen: Synthetic peptide within Human Tyrosine Hydroxylase aa 1-50 / 528.

Positive control: PC-12, mouse brain tissue, MCF-7, N2A, SHG-44, rat brain tissue, SH-SY5Y.

Subcellular location: Cytoplasm. Nucleus.

Database links: SwissProt: P07101 Human | P24529 Mouse | P04177 Rat

Recommended Dilutions:

WB	1:1,000-1:2,000
IF-Cell	1:50-1:200
IHC-P	1:50-1:200
FC	1:50-1:100

Storage Buffer: 1*PBS (pH7.4), 0.2% BSA, 50% Glycerol. Preservative: 0.05% Sodium Azide.

Storage Instruction: Store at +4℃ after thawing. Aliquot store at -20℃ or -80℃. Avoid repeated freeze / thaw cycles.

Purity: Protein A affinity purified.

Images

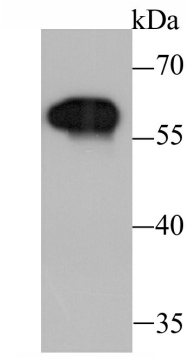

Fig1: Western blot analysis of Tyrosine Hydroxylase on PC-12 cell lysate using anti-Tyrosine Hydroxylase antibody at 1/1,000 dilution.

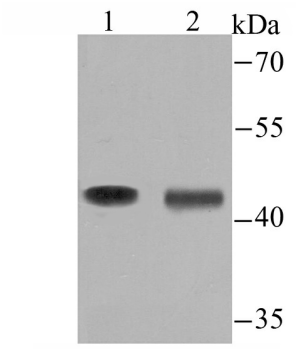

Fig2: Western blot analysis of Tyrosine Hydroxylase on mouse brain tissue (1) and MCF-7 cell (2) lysate using anti-Tyrosine Hydroxylase antibody at 1/500 dilution.

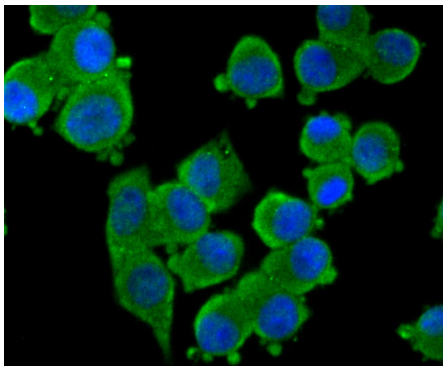

Fig3: ICC staining Tyrosine Hydroxylase in N2A cells (green). The nuclear counter stain is DAPI (blue). Cells were fixed in paraformaldehyde, permeabilised with 0.25% Triton X100/PBS.

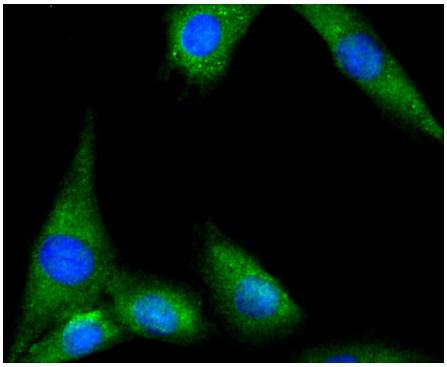

Fig4: ICC staining Tyrosine Hydroxylase in SHG-44 cells (green). The nuclear counter stain is DAPI (blue). Cells were fixed in paraformaldehyde, permeabilised with 0.25% Triton X100/PBS.

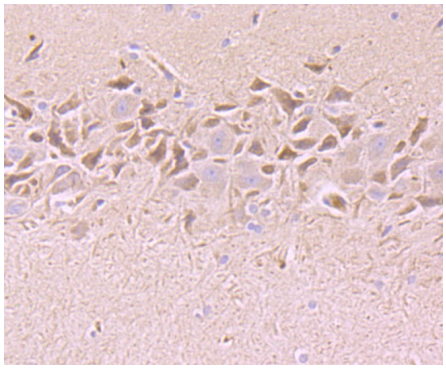

Fig5: Immunohistochemical analysis of paraffin-embedded rat brain tissue using anti-Tyrosine Hydroxylase antibody. Counter stained with hematoxylin.

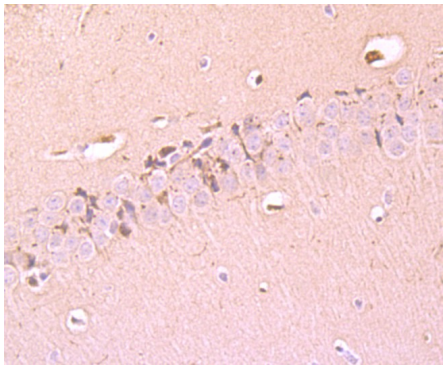

Fig6: Immunohistochemical analysis of paraffin-embedded mouse brain tissue using anti-Tyrosine Hydroxylase antibody. Counter stained with hematoxylin.

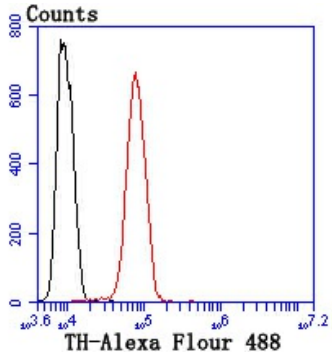

Fig7: Flow cytometric analysis of SH-SY5Y cells with Tyrosine Hydroxylase antibody at 1/100 dilution (red) compared with an unlabelled control (cells without incubation with primary antibody; black).

Note: All products are "FOR RESEARCH USE ONLY AND ARE NOT INTENDED FOR DIAGNOSTIC OR THERAPEUTIC USE".

Background References

1. Ho TJ et al. Effects of Electroacupuncture on Methamphetamine-Induced Behavioral Changes in Mice. Evid Based Complement Alternat Med 2017:5642708 (2017).
2. Bourdenx M et al. Nanoparticles restore lysosomal acidification defects: Implications for Parkinson and other lysosomal-related diseases. Autophagy 12:472-83 (2016).