

Anti-Tyrosine Hydroxylase Antibody (Monoclonal, TH-16)
Catalog # ABO10484**Specification**

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

Application	WB, IHC-P, IHC-F
Primary Accession	P04177
Host	Mouse
Isotype	Mouse IgG1
Reactivity	Human, Rat
Clonality	Monoclonal
Format	Lyophilized

Description

Mouse IgG monoclonal antibody for Tyrosine Hydroxylase, tyrosine hydroxylase (TH) detection. Tested with WB, IHC-P, IHC-F in Human;rat;rabbit. No cross reactivity with other proteins.

Reconstitution

Add 1ml of PBS buffer will yield a concentration of 100ug/ml.

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

Gene ID 25085

Other Names

Tyrosine 3-monooxygenase, 1.14.16.2, Tyrosine 3-hydroxylase, TH, Th

Calculated MW

55966 MW KDa

Application Details

Immunohistochemistry(Paraffin-embedded Section), 0.5-1 µg/ml, Human, rat, rabbit, By Heat

Immunohistochemistry(Frozen Section), 0.5-1 µg/ml, Human, rat, rabbit, -
Western blot, 0.25-0.5 µg/ml, Human, rat, rabbit

Tissue Specificity

TH: Mainly expressed in the brain and adrenal glands.

Protein Name

Tyrosine 3-monooxygenase

Contents

Mouse ascites fluid, 1.2% sodium acetate, 2mg BSA, with 0.01mg NaN₃ as preservative.

Immunogen

Rat tyrosine hydroxylase(TH).

Purification

Ascites

Cross Reactivity

No cross reactivity with other proteins

Storage

At -20°C for one year. After reconstitution, at 4°C for one month. It can also be aliquotted and stored frozen at -20°C for a longer time. Avoid repeated freezing and thawing.

Sequence Similarities

Belongs to the bipterin-dependent aromatic amino acid hydroxylase family.

Anti-Tyrosine Hydroxylase Antibody (Monoclonal, TH-16) - Protein Information**Name** Th**Function**

Catalyzes the conversion of L-tyrosine to L- dihydroxyphenylalanine (L-Dopa), the rate-limiting step in the biosynthesis of catecholamines, dopamine, noradrenaline, and adrenaline. Uses tetrahydrobiopterin and molecular oxygen to convert tyrosine to L-Dopa (By similarity). In addition to tyrosine, is able to catalyze the hydroxylation of phenylalanine and tryptophan but with lower specificity (PubMed:10933781, PubMed:11922614). Positively regulates the regression of retinal hyaloid vessels during postnatal development (By similarity).

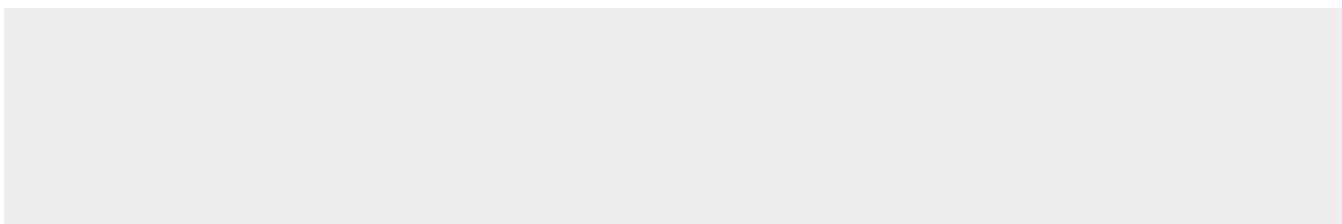
Cellular Location

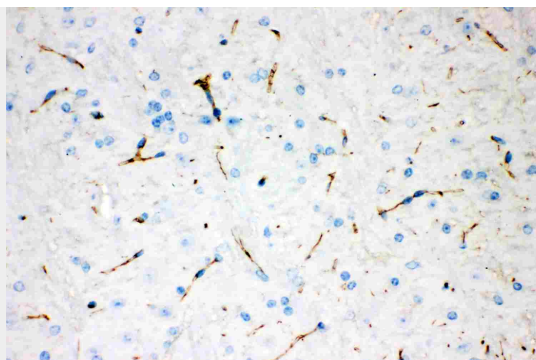
Cytoplasm, perinuclear region {ECO:0000250|UniProtKB:P24529}. Nucleus. Cell projection, axon {ECO:0000250|UniProtKB:P24529}. Cytoplasm. Cytoplasmic vesicle, secretory vesicle, synaptic vesicle. Note=When phosphorylated at Ser-19 shows a nuclear distribution and when phosphorylated at Ser-31 as well as at Ser-40 shows a cytosolic distribution (PubMed:21392500, PubMed:32778969). Expressed in dopaminergic axons and axon terminals (By similarity). {ECO:0000250|UniProtKB:P07101, ECO:0000269|PubMed:21392500}

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

Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

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



Anti- Tyrosine Hydroxylase antibody, ABO10484, IHC(P)IHC(P): Rat Brain Tissue

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

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.