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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 adrenalglands.

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 r˚Constitution, 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 biopterin-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 Cytomety
- Cell Culture

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

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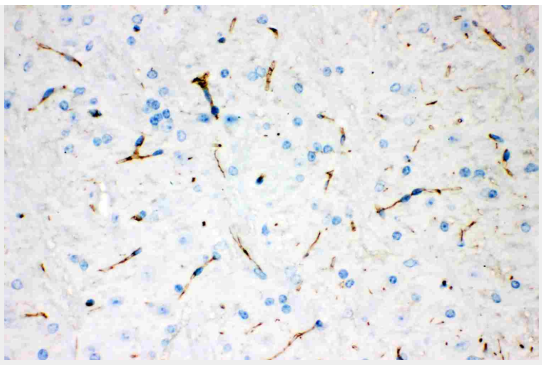

Anti- Tyrosine Hydroxylase antibody, ABO10484, IHC(P)IHC(P): Rat Brain Tissue

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.