

Tyrosine Hydroxylase Antibody Rabbit mAb Catalog # AP90558

Specification

Tyrosine Hydroxylase Antibody - Product Information

ApplicationWB, IHC, FC, ICCPrimary AccessionP07101ReactivityRatClonalityMonoclonalOther NamesEC 1.14.16.2; TH isoform 3; TH isoform a, TH-4;TY3H; TYH; Tyrosine 3-hydroxylase; Tyrosine3-monooxygenase; tyrosine hydroxylase;

Isotype	Rabbit IgG
Host	Rabbit
Calculated MW	58600 Da

Tyrosine Hydroxylase Antibody - Additional Information

Purification Immunogen	Affinity-chromatography A synthesized peptide derived from human Tvrosine Hvdroxvlase
Description	Tyrosine hydroxylase (EC 1.14.16.2) 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.
Storage Condition and Buffer	Rabbit IgG in phosphate buffered saline , pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol. Store at +4°C short term. Store at -20°C long term. Avoid freeze / thaw cycle.

Tyrosine Hydroxylase Antibody - Protein Information

Name TH (<u>HGNC:11782</u>)

Synonyms TYH

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 (PubMed:15287903, PubMed:1680128, PubMed:1680128, PubMed:17391063, PubMed:



href="http://www.uniprot.org/citations/24753243" target="_blank">24753243, PubMed:3492205, PubMed:8528210, Ref.18). In addition to tyrosine, is able to catalyze the hydroxylation of phenylalanine and tryptophan with lower specificity (By similarity). Positively regulates the regression of retinal hyaloid vessels during postnatal development (By similarity).

Cellular Location

Cytoplasm, perinuclear region {ECO:0000250|UniProtKB:P24529}. Nucleus {ECO:0000250|UniProtKB:P04177} Cell projection, axon {ECO:0000250|UniProtKB:P24529}. Cytoplasm {ECO:0000250|UniProtKB:P04177}. Cytoplasmic vesicle, secretory vesicle, synaptic vesicle {ECO:0000250|UniProtKB:P04177}. Note=When phosphorylated at Ser-19 shows a nuclear distribution and when phosphorylated at Ser-31 as well at Ser-40 shows a cytosolic distribution (By similarity). Expressed in dopaminergic axons and axon terminals. {ECO:0000250|UniProtKB:P04177}

Tissue Location

Mainly expressed in the brain and adrenal glands.

Tyrosine Hydroxylase Antibody - Protocols

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

- Western Blot
- <u>Blocking Peptides</u>
- Dot Blot
- <u>Immunohistochemistry</u>
- <u>Immunofluorescence</u>
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

Tyrosine Hydroxylase Antibody - Images



Western blot analysis of Tyrosine Hydroxylase expression in PC-3 cell lysate.