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Anti-Tyrosine Hydroxylase Picoband Antibody

Catalog # ABO12138

Product Information

Application	WB, IHC-P
Primary Accession	P07101
Host	Rabbit
Reactivity	Mouse, Rat
Clonality	Polyclonal
Format	Lyophilized
Description	Rabbit IgG polyclonal antibody for Tyrosine 3-monooxygenase(TH) detection. Tested with WB, IHC-P in Mouse;Rat.
Reconstitution	Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

Additional Information

Gene ID	7054
Other Names	Tyrosine 3-monooxygenase, 1.14.16.2, Tyrosine 3-hydroxylase, TH, TH, TYH
Calculated MW	58600
Application Details	Immunohistochemistry(Paraffin-embedded Section), 0.5-1 □g/ml, Mouse, Rat, Human, By Heat Western blot, 0.1-0.5 □g/ml, Mouse, Rat, Human
Tissue Specificity	Mainly expressed in the brain and adrenal glands.
Source	Eukaryota
Protein Name	Tyrosine 3-monooxygenase
Contents	Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na2HPO4, 0.05mg NaN3.
Immunogen	A synthetic peptide corresponding to a sequence in the middle region of human Tyrosine Hydroxylase (193-222aa KVPWFPRKVSELDKCHHLVTKFDPDLDLDH), identical to the related mouse and rat sequences.
Purification	Immunogen affinity purified.
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.

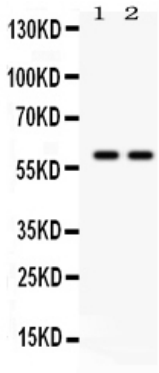
Protein Information

Name	TH (HGNC:11782)
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:17391063, PubMed:24753243, PubMed:34922205, 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.

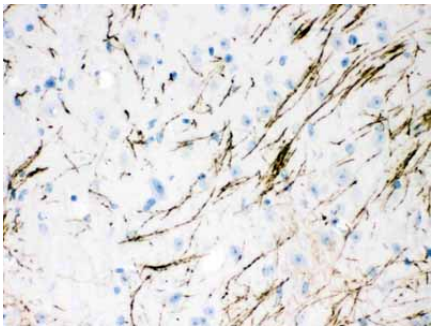
Background

TH is equal to tyrosine hydroxylase. The protein encoded by this gene is involved in the conversion of tyrosine to dopamine. It is the rate-limiting enzyme in the synthesis of catecholamines, hence plays a key role in the physiology of adrenergic neurons. Mutations in this gene have been associated with autosomal recessive Segawa syndrome. Alternatively spliced transcript variants encoding different isoforms have been noted for this gene. In humans, tyrosine hydroxylase is encoded by the TH gene, and the enzyme is present in the central nervous system (CNS), peripheral sympathetic neurons and the adrenal medulla. Tyrosine hydroxylase, phenylalanine hydroxylase and tryptophan hydroxylase together make up the family of aromatic amino acid hydroxylases (AAAHs).

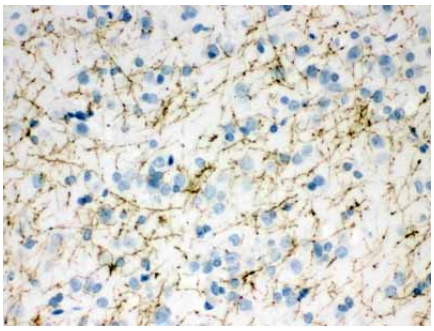
Images



Anti- Tyrosine Hydroxylase Picoband antibody, ABO12138, Western blottingAll lanes: Anti Tyrosine Hydroxylase (ABO12138) at 0.5ug/mlLane 1: Rat Brain Tissue Lysate at 50ugLane 2: Mouse Brain Tissue Lysate at 50ugPredicted bind size: 59KDObserved bind size: 59KD



Anti- Tyrosine Hydroxylase Picoband antibody, ABO12138,IHC(P)IHC(P): Mouse Brain Tissue



Anti- TH Picoband antibody, ABO12138,IHC(P)IHC(P): Rat Brain Tissue

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.