

Tyrosine Hydroxylase Polyclonal Antibody

Catalog # AP74288

Product Information

Application	WB
Primary Accession	<u>P07101</u>
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Calculated MW	58600

Additional Information

Gene ID	7054
Other Names	Tyrosine 3-monooxygenase (EC 1.14.16.2) (Tyrosine 3-hydroxylase) (TH)
Dilution	WB~~WB 1:500-2000, ELISA 1:10000-20000
Format	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.09% (W/V) sodium azide.
Storage Conditions	-20°C

Protein Information

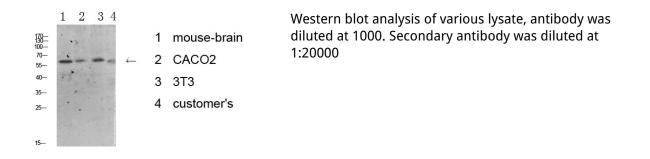
Name	TH (<u>HGNC:11782</u>)
Synonyms	ТҮН
Function	Catalyzes the conversion of L-tyrosine to L- dihydroxyphenylalanine (L-Dopa), the rate-limiting step in the biosynthesis of catecholamines, dopamine, noradrenaline, and adrenaline. Uses tetrahydrobiopterin and molecular oxygen to convert tyrosine to L-Dopa (PubMed: <u>15287903</u> , PubMed: <u>1680128</u> , PubMed: <u>17391063</u> , PubMed: <u>24753243</u> , PubMed: <u>34922205</u> , PubMed: <u>8528210</u> , 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 LocationMainly expressed in the brain and adrenal glands.

Background

Plays an important role in the physiology of adrenergic neurons.

Images



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