

# Tyrosine Hydroxylase Polyclonal Antibody

Catalog # AP74288

## Product Information

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<b>Application</b>	WB, E
<b>Primary Accession</b>	<a href="#">P07101</a>
<b>Reactivity</b>	Human, Mouse, Rat
<b>Host</b>	Rabbit
<b>Clonality</b>	Polyclonal
<b>Calculated MW</b>	58600

## Additional Information

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

## Protein Information

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<b>Name</b>	TH ( <a href="#">HGNC:11782</a> )
<b>Synonyms</b>	TYH
<b>Function</b>	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: <a href="#">15287903</a> , PubMed: <a href="#">1680128</a> , PubMed: <a href="#">17391063</a> , PubMed: <a href="#">24753243</a> , PubMed: <a href="#">34922205</a> , PubMed: <a href="#">8528210</a> , 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).
<b>Cellular Location</b>	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.

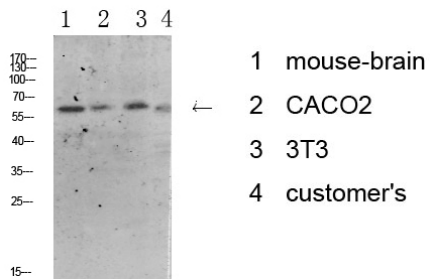
## Background

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Plays an important role in the physiology of adrenergic neurons.

## Images

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Western blot analysis of various lysate, antibody was diluted at 1000. Secondary antibody was diluted at 1:20000

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