

**Anti-Tyrosine Hydroxylase (pS19) Antibody**  
Rabbit polyclonal antibody to Tyrosine Hydroxylase (pS19)  
Catalog # AP60518

## Specification

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### Anti-Tyrosine Hydroxylase (pS19) Antibody - Product Information

Application	WB, IF
Primary Accession	<a href="#">P07101</a>
Other Accession	<a href="#">P24529</a>
Reactivity	Human, Mouse, Rat, Bovine, Dog
Host	Rabbit
Clonality	Polyclonal
Calculated MW	58600

### Anti-Tyrosine Hydroxylase (pS19) Antibody - Additional Information

Gene ID 7054

#### Other Names

TYH; Tyrosine 3-monooxygenase; Tyrosine 3-hydroxylase; TH

#### Target/Specificity

Recognizes endogenous levels of Tyrosine Hydroxylase (pS19) protein.

#### Dilution

WB~~WB (1/500 - 1/1000), IH (1/100 - 1/200), IF/IC (1/100 - 1/500)

IF~~WB (1/500 - 1/1000), IH (1/100 - 1/200), IF/IC (1/100 - 1/500)

#### Format

Liquid in 0.42% Potassium phosphate, 0.87% Sodium chloride, pH 7.3, 30% glycerol, and 0.09% (W/V) sodium azide.

#### Storage

Store at -20 °C. Stable for 12 months from date of receipt

### Anti-Tyrosine Hydroxylase (pS19) Antibody - 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:<a href="http://www.uniprot.org/citations/15287903" target="\_blank">15287903</a>, PubMed:<a href="http://www.uniprot.org/citations/1680128" target="\_blank">1680128</a>, PubMed:<a href="http://www.uniprot.org/citations/17391063" target="\_blank">17391063</a>, PubMed:<a href="http://www.uniprot.org/citations/17391063" target="\_blank">17391063</a>, PubMed:<a href="http://www.uniprot.org/citations/17391063" target="\_blank">17391063</a>, PubMed:<a href="http://www.uniprot.org/citations/17391063" target="\_blank">17391063</a>)

href="http://www.uniprot.org/citations/24753243" target="\_blank">24753243</a>, PubMed:<a href="http://www.uniprot.org/citations/34922205" target="\_blank">34922205</a>, PubMed:<a href="http://www.uniprot.org/citations/8528210" target="\_blank">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).

#### 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 as Ser-40 shows a cytosolic distribution (By similarity). Expressed in dopaminergic axons and axon terminals. {ECO:0000250|UniProtKB:P04177}

#### Tissue Location

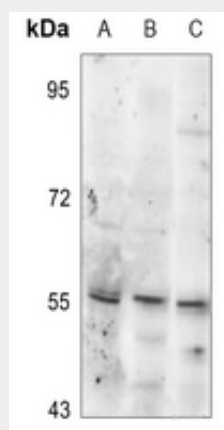
Mainly expressed in the brain and adrenal glands.

### Anti-Tyrosine Hydroxylase (pS19) Antibody - Protocols

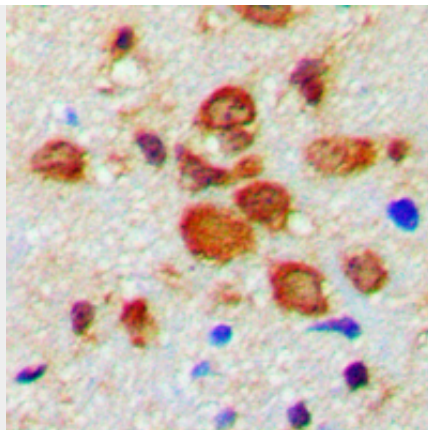
Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

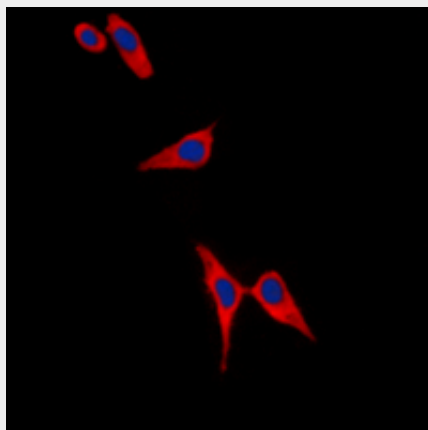
### Anti-Tyrosine Hydroxylase (pS19) Antibody - Images



Western blot analysis of Tyrosine Hydroxylase (pS19) expression in rat brain (A), mouse brain (B), MCF7 (C) whole cell lysates.



Immunohistochemical analysis of Tyrosine Hydroxylase (pS19) staining in human brain formalin fixed paraffin embedded tissue section. The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH 6.0). The section was then incubated with the antibody at room temperature and detected using an HRP conjugated compact polymer system. DAB was used as the chromogen. The section was then counterstained with haematoxylin and mounted with DPX.



Immunofluorescent analysis of Tyrosine Hydroxylase (pS19) staining in A549 cells. Formalin-fixed cells were permeabilized with 0.1% Triton X-100 in TBS for 5-10 minutes and blocked with 3% BSA-PBS for 30 minutes at room temperature. Cells were probed with the primary antibody in 3% BSA-PBS and incubated overnight at 4 °C in a humidified chamber. Cells were washed with PBST and incubated with a DyLight 594-conjugated secondary antibody (red) in PBS at room temperature in the dark. DAPI was used to stain the cell nuclei (blue).

#### **Anti-Tyrosine Hydroxylase (pS19) Antibody - Background**

KLH-conjugated synthetic peptide encompassing a sequence within the N-term region of human Tyrosine Hydroxylase (pS19). The exact sequence is proprietary.