

**Tyrosine Hydroxylase Polyclonal Antibody**  
**Purified Rabbit Polyclonal Antibody (Pab)**  
**Catalog # AP57759****Specification**

---

**Tyrosine Hydroxylase Polyclonal Antibody - Product Information**

Application	IHC-P
Primary Accession	<a href="#">P24529</a>
Reactivity	Rat
Host	Rabbit
Clonality	Polyclonal
Calculated MW	55993

**Tyrosine Hydroxylase Polyclonal Antibody - Additional Information****Gene ID** 21823**Other Names**

Tyrosine 3-monoxygenase, 1.14.16.2, Tyrosine 3-hydroxylase, TH, Th

**Format**

0.01M TBS(pH7.4), 0.09% (W/V) sodium azide and 50% Glyce

**Storage**

Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.

**Tyrosine Hydroxylase Polyclonal Antibody - Protein Information****Name** Th**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 (By similarity). 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 (PubMed:<a href="http://www.uniprot.org/citations/30936473" target="\_blank">30936473</a>).

**Cellular Location**

Cytoplasm, perinuclear region. Nucleus {ECO:0000250|UniProtKB:P04177} Cell projection, axon. 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 at Ser-40 shows a cytosolic distribution (By similarity). Expressed in dopaminergic axons and axon terminals (PubMed:17296554). {ECO:0000250|UniProtKB:P04177, ECO:0000269|PubMed:17296554}

### Tissue Location

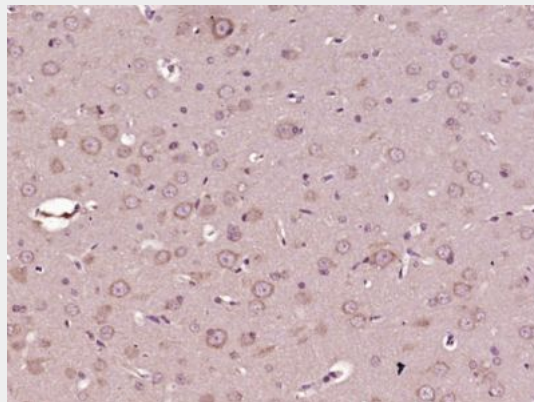
Expressed in the adrenal gland (PubMed:1674869). Expressed in the retina (PubMed:30936473).  
Expressed in the in the striatum (at protein level) (PubMed:17296554)

### Tyrosine Hydroxylase Polyclonal Antibody - Protocols

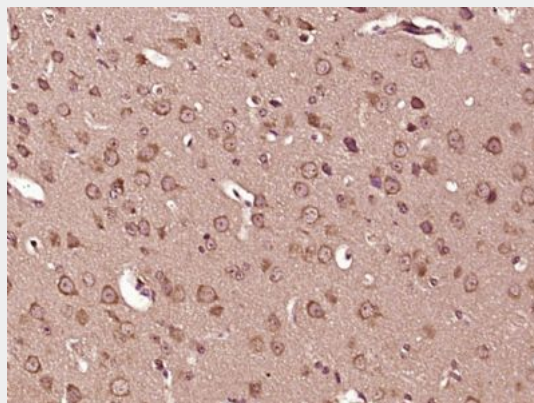
Provided below are standard protocols that you may find useful for product applications.

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

### Tyrosine Hydroxylase Polyclonal Antibody - Images



Paraformaldehyde-fixed, paraffin embedded (Rat brain); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (Tyrosine Hydroxylase) Polyclonal Antibody, Unconjugated (bs-20080R) at 1:400 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructions and DAB staining.



Paraformaldehyde-fixed, paraffin embedded (Mouse brain); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with

(Tyrosine Hydroxylase) Polyclonal Antibody, Unconjugated (bs-20080R) at 1:400 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructions and DAB staining.