

**Tyrosine Hydroxylase Antibody**  
Affinity purified sheep polyclonal antibody  
Catalog # AN1062

**Specification**

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**Tyrosine Hydroxylase Antibody - Product Information**

Application	WB, IF
Primary Accession	<a href="#">P04177</a>
Reactivity	Bovine, Human, Mouse, Rat
Host	Sheep
Clonality	polyclonal
Calculated MW	60 KDa

**Tyrosine Hydroxylase Antibody - Additional Information**

Gene ID	25085
Gene Name	TH
<b>Other Names</b>	
Tyrosine 3-monooxygenase, Tyrosine 3-hydroxylase, TH, Th	

**Target/Specificity**

SDS-denatured, native rat tyrosine hydroxylase purified from pheochromocytoma.

**Dilution**

WB~~ 1:1000  
IF~~ 1:1000

**Format**

Prepared from sheep serum by affinity purification using a column to which immunogen was coupled. The antibody is predominantly of the IgG1 subclass.

**Antibody Specificity**

Specific for the ~60k tyrosine hydroxylase protein

**Storage**

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

**Precautions**

Tyrosine Hydroxylase Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

**Shipping**

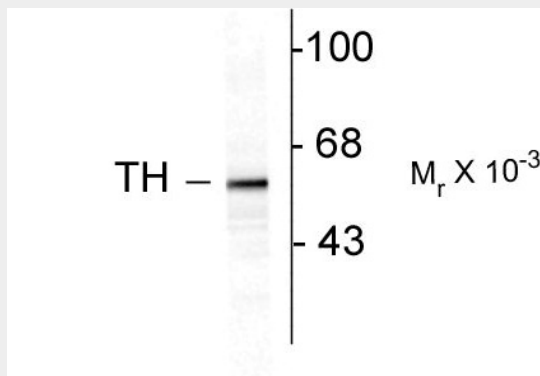
Blue Ice

**Tyrosine Hydroxylase Antibody - Protocols**

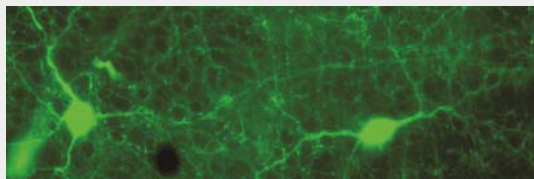
Provided below are standard protocols that you may find useful for product applications.

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

### Tyrosine Hydroxylase Antibody - Images



Western blot of 10 ug of rat caudate lysate showing specific immunolabeling of the ~ 60 k tyrosine hydroxylase proteins.



Immunostaining of rabbit retina showing specific labeling of tyrosine hydroxylase in green.

### Tyrosine Hydroxylase Antibody - Background

Tyrosine hydroxylase (TH) is the rate-limiting enzyme in the synthesis of the catecholamines dopamine and norepinephrine. TH antibodies can therefore be used as markers for dopaminergic and noradrenergic neurons in a variety of applications including depression, schizophrenia, Parkinson's disease and drug abuse (Kish et al., 2001; Zhu et al., 2000; Zhu et al., 1999). TH antibodies can also be used to explore basic mechanisms of dopamine and norepinephrine signaling (Witkovsky et al., 2000; Salvatore et al., 2001).

### Tyrosine Hydroxylase Antibody - References

- Kish SJ, Kalasinsky KS, Derkach P, Schmunk GA, Guttman M, Ang L, Adams V, Furukawa Y, Haycock JW (2001) Striatal dopaminergic and serotonergic markers in human heroin users. *Neuropsychopharmacology* 24:561-567.
- Salvatore MF, Waymire JC, Haycock JW (2001) Depolarization-stimulated catecholamine biosynthesis: involvement of protein kinases and tyrosine hydroxylase phosphorylation sites in situ. *J Neurochem* 79:349-360.
- Witkovsky P, Gabriel R, Haycock JW, Meller E (2000) Influence of light and neural circuitry on tyrosine hydroxylase phosphorylation in the rat retina. *J Chem Neuroanat* 19:105-116.
- Zhu MY, Klimek V, Haycock JW, Ordway GA (2000) Quantitation of tyrosine hydroxylase protein in the locus coeruleus from postmortem human brain. *J Neurosci Meth* 99:37-44.
- Zhu MY, Klimek V, Dilley GE, Haycock JW, Stockmeier C, Overholser JC, Meltzer HY, Ordway GA

(1999) Elevated levels of tyrosine hydroxylase in the locus coeruleus in major depression. Biol Psychiatry 46:1275-1286.