

Tyrosine Hydroxylase Antibody
Affinity purified sheep polyclonal antibody
Catalog # AN1062

Specification

Tyrosine Hydroxylase Antibody - Product Information

Application	WB, IF
Primary Accession	P04177
Reactivity	Bovine, Human, Mouse, Rat
Host	Sheep
Clonality	polyclonal
Calculated MW	60 KDa

Tyrosine Hydroxylase Antibody - Additional Information

Gene ID	25085
Gene Name	TH
Other Names	
Tyrosine 3-monoxygenase, 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

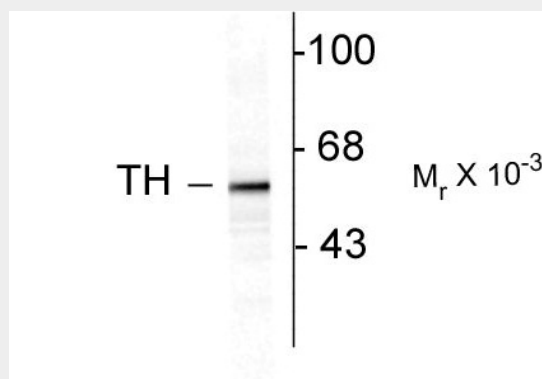
Blue Ice

Tyrosine Hydroxylase Antibody - Protocols

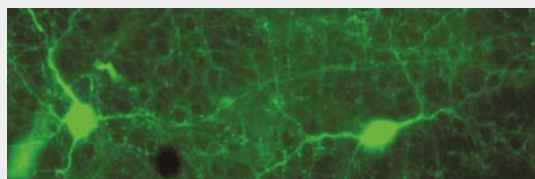
Provided below are standard protocols that you may find useful for product applications.

- [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.