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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-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.

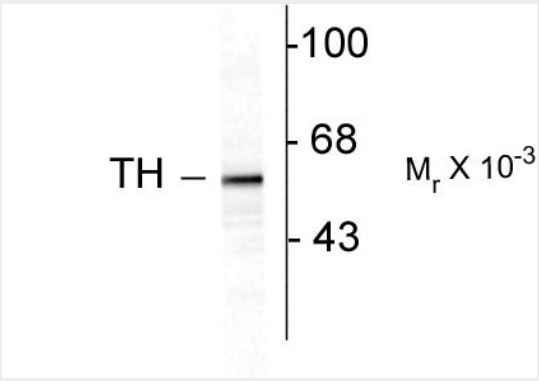
Shipping
Blue Ice

Tyrosine Hydroxylase Antibody - Protocols

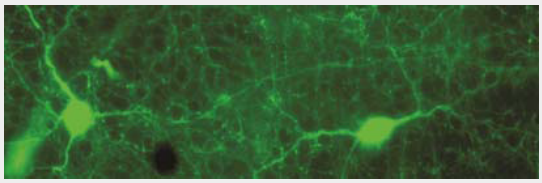
Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- 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.