

Sheep Tyrosine Hydroxylase Polyclonal Antibody | anti-TH antibody

Anti-Tyrosine Hydroxylase

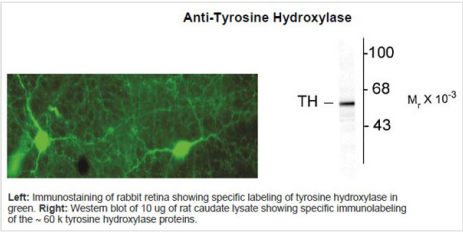
CATALOG # AAA72804	HOST Sheep	REACTIVITY All mammalian	APPLICATIONS Dot Blot, Immunohistochemistry, Immunofluorescence, Western Blot
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PRODUCT SYNONYMS

Tyrosine Hydroxylase; Polyclonal Antibody; Anti-Tyrosine Hydroxylase; anti-TH antibody

PRODUCT SPECIFICATIONS

Host	Sheep
Reactivity	All mammalian
Clonality	Polyclonal
Specificity	Specific for the ~60k tyrosine Hydroxylase protein in Western Blot of rat brain lysate and PC-12 cells stimulated by Okadaic acid. The antibody cross-reacts with all mammalian and at least some non-mammalian forms of the enzyme in WB and IF/IHC.
Purity/Purification	Affinity Purified (Prepared from sheep serum by affinity purification using a column to which immunogen was coupled. The antibody is predominantly of the IgG1 subclass.)
Form/Format	100 ul in 10 mM HEPES (pH 7.5), 150 mM NaCl, 100 ug per ml BSA and 50% glycerol. Adequate amount of material to conduct 10-mini Western Blots
Sequence Length	498
Applicable Applications for anti-TH antibody	DB (Dot Blot), IHC (Immunohistochemistry), IF (Immunofluorescence), WB (Western Blot)
Antigen	Native rat tyrosine hydroxylase, purified from pheochromocytoma.
Immunogen Information	SDS-denatured, native rat tyrosine hydroxylase purified from pheochromocytoma
Immunogen Species	Rat
Species Reactivity Note	The antibody recognizes all mammalian and at least some non-mammalian forms of the enzyme in Western blots and in IHC/IF.
Biological Significance	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.,
Preparation and Storage	For long term storage -80 degree C is recommended, but shorter term storage at -20 degree C is also acceptable as aliquotes may be taken without freeze/thwaing due to the presence of 50% glycerol. Stock solutions are stable for a minimum of 1 year at -20 degree C.



Application Data

ADDITIONAL INFORMATION

Related Product Information for anti-TH antibody	Affinity purified sheep polyclonal 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.

NCBI AND UNIPROT INFORMATION

NCBI GI #	6981652
NCBI GeneID	25085
NCBI Accession #	NP_036872.1
NCBI GenBank Nucleotide #	NM_012740.3
UniProt Accession #	P04177
Molecular Weight	60
NCBI Official Full Name	tyrosine 3-monooxygenase
NCBI Official Synonym Full Names	tyrosine hydroxylase
NCBI Official Symbol	Th
NCBI Official Synonym Symbols	The
NCBI Protein Information	tyrosine 3-monooxygenase; tyrosine 3-hydroxylase
UniProt Protein Name	Tyrosine 3-monooxygenase
UniProt Gene Name	Th
UniProt Synonym Gene Names	TH
UniProt Entry Name	TY3H_RAT

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.