

Goat Tyrosine Hydroxylase Polyclonal Antibody | anti-TH antibody

Tyrosine Hydroxylase

CATALOG # AAA76722	HOST Goat	REACTIVITY Human, Mouse, Rat	APPLICATIONS Immunofluorescence, Western Blot, Immunocytochemistry
------------------------------	---------------------	--	--

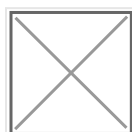
PRODUCT SYNONYMS

Tyrosine Hydroxylase; Polyclonal Antibody; anti-TH antibody

PRODUCT SPECIFICATIONS

Host	Goat
Reactivity	Human, Mouse, Rat
Clonality	Polyclonal
Form/Format	Supplied in 50% PBS, 50% glycerol plus 5mM NaN3
Concentration	1mg/mL (varies by lot)
Applicable Applications for anti-TH antibody	IF (Immunofluorescence), WB (Western Blot), ICC (Immunocytochemistry)
Immunogen	Full length human TH expressed in and purified from E coli.
Preparation and Storage	Antibody can also be aliquotted and stored frozen at -20 degrees C in a manual defrost freezer for six months without detectable loss of activity. The antibody can be stored at 2 degree C to 8 degree C for 1 month without detectable loss of activity. Avoid repeated freeze-thaw cycles.

IMAGES



IF (Immunofluorescence)

Immunofluorescent analysis of rat brain sections stained with goat pAb to tyrosine hydroxylase, dilution 1:2,000, in red. The blue is Hoechst staining of nuclear DNA. Following transcardial perfusion of rat with 4% paraformaldehyde, brain was post fixed for 24 hours, cut to 45µM, and free-floating sections were stained with above antibodies. The antibody strongly and specifically stains the striatal TH-expressing interneurons. Inset top left shows neuronal cell bodies and top right shows beaded process, while the main image shows an overview of the caudate/putamen and TH positive nerve fibers.

ADDITIONAL INFORMATION

Related Product Information for anti-TH antibody	Tyrosine hydroxylase (TH) is a vital enzyme responsible for the generation of L-DOPA from the amino acid tyrosine. L-DOPA is the direct precursor of the neurotransmitter dopamine, and dopamine can itself be processed to produce the neurotransmitters adrenalin and noradrenalin (a.k.a. epinephrin and norepinephrin respectively). Neurons which use dopamine, adrenalin or noradrenaline, called collectively chatecholamines, must express TH. TH has a very restricted distribution in the brain but is highly expressed in the cells in which it is found. As a result antibodies to TH are useful for the identification of chatecholaminergic neurons. TH positive neurons in the rat are localized into clusters of cells most of which are in the brain stem, including notably the substantia nigra and locus ceruleus. Parkinson's disease is caused by the loss of TH positive dopaminergic neurons in the substantia nigra, which are also relatively low in number, and perturbation of TH neurons has been implicated in Alzheimer's disease and schizophrenia. MBS556590 was made against full length recombinant human TH based on the 524 amino acid sequence in NP_954987.2, expressed in and purified from E. coli. The antibody works well on cells in culture and tissue sections.
--	---

NCBI AND UNIPROT INFORMATION

NCBI GI #	88900503
NCBI GeneID	7054
NCBI Accession #	NP_000351.2
NCBI GenBank Nucleotide #	NM_000360.3
UniProt Accession #	P07101; Q15585; Q15588; Q15589; B7ZL70
NCBI Official Full Name	tyrosine 3-monooxygenase isoform b
NCBI Official Synonym Full Names	tyrosine hydroxylase
NCBI Official Symbol	TH
NCBI Official Synonym Symbols	TYH; DYT14; DYT5b
NCBI Protein Information	tyrosine 3-monooxygenase; dystonia 14; tyrosine 3-hydroxylase
UniProt Protein Name	Tyrosine 3-monooxygenase
UniProt Gene Name	TH
UniProt Synonym Gene Names	TYH; TH
UniProt Entry Name	TY3H_HUMAN

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.