

Product Info

PRODUCT NAME	Tyrosine Hydroxylase (TH), Rabbit Polyclonal Antibody
PRODUCT DESCRIPTION	Rabbit anti-Tyrosine Hydroxylase (TH) Polyclonal Antibody (Unconjugated), suitable for IHC-Frozen.
CATALOG NUMBER(S)	R-118-100
UNIT SIZE(S)	100 μL
BATCH NUMBER	Please see item label.
SPECIFICITY	IHC on brain shows a pattern of staining specific for TH containing neurons. This antibody is known to react with rat, mouse and guinea pig. Cross reactivity with other species has not yet been tested.
APPLICATION(S)	IHC-Frozen, WB
APPLICATION DETAILS	Immunohistochemistry (IHC): 1:2,000 to 1:5,000, dilutions of up to 1:100,000 have been reported. This is a superb antibody for detection of tyrosine hydroxylase (TH) containing neurons exhibiting an intense labelling with a negligible background. This antiserum has proven extremely useful for staining of catecholaminergic neurons. It stains nicely and intensely dendritic processes and fine nerve terminals. We recommend mouse or rat brain containing catecholaminergic neurons as a positive control for this antibody, for example brain stem or striatum. Western blotting (WB): 1:100 to 1:500. Antibody has been tested on RIPA-extracted PC12 cell lysate and shown to be specific for TH (~60 kDa). Tissue homogenates show a higher level of non-specific binding and presence of uncharacterized bands. Affinity-purified anti-TH antibody (R-148-50) is recommended for tissue homogenates. Biosensis recommends optimal dilutions/concentrations should be determined by the end user.
TARGET	Tyrosine Hydroxylase (TH)
ALTERNATIVE NAMES	TH; Tyrosine hydroxylase; Tyrosine 3-monooxygenase; L-tyrosine hydroxylase; Tyrosine 3-hydroxylase
UNIPROT NUMBER AND NAME	P04177 (TY3H_RAT)
TARGET HOST SPECIES	Rat
SPECIES REACTIVITY	Guinea Pig, Mouse, Rat
ANTIBODY HOST	Rabbit
ANTIBODY TYPE	Polyclonal
ANTIBODY ISOTYPE	Mixed
CONJUGATE	Unconjugated
IMMUNOGEN DESCRIPTION	A synthetic peptide (PRFIGRRQSLIEDARK) as part of human Tyrosine Hydroxylase (63-78) conjugated to KLH has been used as the immunogen. The peptide is homologous with the corresponding sequence derived from TH protein in rat (31-47).
FORMAT	Lyophilized



RECONSTITUTION INSTRUCTIONS	Spin vial briefly before opening. Reconstitute in 100 μ L sterile-filtered, ultrapure water. Centrifuge to remove any insoluble material.
PURITY DESCRIPTION	Whole serum
STORAGE INSTRUCTIONS	After reconstitution keep aliquots at -20°C for a higher stability, and at 2-8°C with an appropriate antibacterial agent. Glycerol (1:1) may be added for an additional stability. Avoid repetitive freeze/thaw cycles.
EXPIRATION DATE	12 months after date of receipt (unopened vial).
MAIN IMAGE	250 kDa — 150 kDa — 150 kDa — 75 kDa — 50 kDa — 25 bLDa — Data generated using the L-COR® C-DIGe® Biot Scanner
MAIN IMAGE CAPTION	Left: Western Blot analysis of tyrosine hydroxylase (TH) expression in PC12 cell lysate (6 ug protein/lane). The anti-TH rabbit antibody (1:300) detects one specific band at ~60 kDa corresponding to the expected molecular weight of TH. Method: SDS Page: denaturing and reducing, 4-12% Bis-Tris gel; Transfer: Tris-Glycine (Towbin's buffer) with 20% methanol; Membrane: PVDF (0.45 um); Blocking: 5% skim milk in TBST, 1 hr at RT; Primary antibody: R-118-100 (1:300), overnight at 2-8°C; Secondary antibody: donkey anti-rabbit (1:25,000), 1 hr at RT; Detection: Chemiluminescence. Right: Detection of TH-immunoreactivity in dopaminergic neurons in the rat zona incerta in formalin-fixed floated cryostat section by Immunohistochemistry . TH was visualized with the rabbit polyclonal antiserum (R-118-100; 1:100,000) using the biotinylated secondary antibody-ABC method and nickel-diaminobenzidine chromogen. Photo courtesy of Dr. Erik Hrabovszky, Hungarian Academy of Sciences, Budapest, Hungary.
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