

Product Datasheet

Tyrosine Hydroxylase [p Ser40] Antibody - Azide Free NB300-173

Unit Size: 0.1 ml

Store at -20C. Avoid freeze-thaw cycles.

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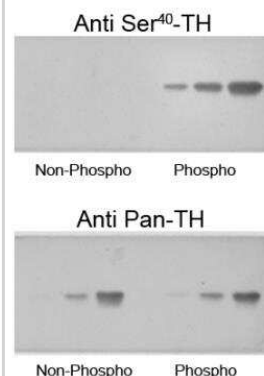


NB300-173**Tyrosine Hydroxylase [p Ser40] Antibody - Azide Free**

Product Information	
Unit Size	0.1 ml
Concentration	Please see the vial label for concentration. If unlisted please contact technical services.
Storage	Store at -20C. Avoid freeze-thaw cycles.
Clonality	Polyclonal
Preservative	No Preservative
Isotype	IgG
Purity	Antigen Affinity-purified
Buffer	10 mM HEPES (pH 7.5), 0.15 M NaCl, 0.1 mg/mL BSA, 50% Glycerol
Target Molecular Weight	60 kDa
Product Description	
Description	Novus Biologicals Rabbit Tyrosine Hydroxylase [p Ser40] Antibody - Azide Free (NB300-173) is a polyclonal antibody validated for use in IHC, WB and ICC/IF. Anti-Tyrosine Hydroxylase Antibody: Cited in 9 publications. All Novus Biologicals antibodies are covered by our 100% guarantee.
Host	Rabbit
Gene ID	7054
Gene Symbol	TH
Species	Mouse, Rat, Mammal
Reactivity Notes	Reactivity assumed based on sequence identity to a wide variety of mammalian and non-mammalian species.
Marker	Neuronal Marker
Specificity/Sensitivity	Specific for the ~60 kDa tyrosine hydroxylase protein phosphorylated at Ser40. Some higher molecular weight bands may be detected by the antibody depending upon the brain region being studied, protein loads and the detection methods used. The antibody has three orders of magnitude selectivity over dephospho TH.
Immunogen	Synthetic phospho-peptide corresponding to amino acid residues surrounding Tyrosine Hydroxylase conjugated to KLH. Accession # P04177
Product Application Details	
Applications	Western Blot, Immunocytochemistry/ Immunofluorescence, Immunohistochemistry, Immunohistochemistry-Frozen
Recommended Dilutions	Western Blot 1:1000, Immunohistochemistry 1:1000, Immunocytochemistry/ Immunofluorescence 1:1000, Immunohistochemistry-Frozen 1:1000

Images

Tyrosine Hydroxylase [p Ser40] Antibody [NB300-173] - Western blot of recombinant phospho-TH and non-phospho-TH showing selective immunolabeling by the phosphospecific antibody of the ~60 kDa TH phosphorylated at Ser40. The pan-specific antibody (anti-pan-TH) recognized both the phospho- and non-phospho-TH; while most importantly, the phospho-specific antibody (anti-Ser40 TH) recognized only phospho-TH.



Immunohistochemistry: Tyrosine Hydroxylase [p Ser40] Antibody [NB300-173] - Immunohistochemical staining of retina with the pan-tyrosine hydroxylase (pan-TH) and phospho-specific tyrosine hydroxylase (phospho-TH) antibodies. The pan-TH antibody shows extensive labeling in this photomicrograph of the retina. In contrast, the phospho-TH antibody selectively labels only the two amacrine cells in this light-stimulated retina example.



Publications

Naumova AA, Oleynik EA, Khramtsova AV et al. Short-term hindlimb unloading negatively affects dopaminergic transmission in the nigrostriatal system of mice *Developmental neurobiology* 2023-07-24 [PMID: 37489016]

Bourdon R Regulation of epinephrine biosynthesis by intermittent and continuous hypoxia *Nat Commun* 2020-02-07 [PMID: 32024825]

Thapa D, Valente JS, Barrett B Et al. Dysfunctional TRPM8 signalling in the vascular response to environmental cold in ageing *eLife* 2021-11-02 [PMID: 34726597] (WB, Mouse)

Acosta G, Race N, Herr S et al. Acrolein-mediated alpha-synuclein pathology involvement in the early post-injury pathogenesis of mild blast-induced Parkinsonian neurodegeneration *Mol. Cell. Neurosci.* 2019-06-12 [PMID: 31201929] (WB, Rat)

Acosta GHG. Susceptibility of parkinson's disease following mild blast traumatic brain injury Thesis. 2014-08-01 (WB, Rat)

Solz J, Joseph V, Soulage C et al. Erythropoietin regulates hypoxic ventilation in mice by interacting with brainstem and carotid bodies *J Physiol.* 2005-10-15 [PMID: 16051624] (IF/IHC, Mouse)

Witkovsky P, Gabriel R, Haycock JW et al. Influence of light and neural circuitry on tyrosine hydroxylase phosphorylation in the rat retina. *J Chem Neuroanat.* 2000-06-01 [PMID: 10936746] (IHC-Fr)

Gassmann M, Pfistner C, Doan VD et al. Impaired ventilatory acclimatization to hypoxia in female mice overexpressing erythropoietin: unexpected deleterious effect of estradiol in carotid bodies. *Am J Physiol Regul Integr Comp Physiol* 2010-12-01 [PMID: 20861276] (ICC/IF, IHC-Fr, Mouse)

Salvatore, MF et al. Stoichiometry of tyrosine hydroxylase phosphorylation in the nigrostriatal mesolimbic systems in vivo: effects of acute haloperidol related compounds. *J Neurochem*, 75: 225-232. 2000-01-01 [PMID: 10854265]

Lew, JY et al. Increased site-specific phosphorylation of tyrosine hydroxylase accompanies stimulation of enzymatic activity induced by cessation of dopamine neuronal activity. *Mol Pharm*, 55: 202-209. 1998-01-01 [PMID: 9927609]



Novus Biologicals USA

10730 E. Briarwood Avenue
Centennial, CO 80112
USA
Phone: 303.730.1950
Toll Free: 1.888.506.6887
Fax: 303.730.1966
nb-customerservice@bio-techne.com

Bio-Techne Canada

21 Canmotor Ave
Toronto, ON M8Z 4E6
Canada
Phone: 905.827.6400
Toll Free: 855.668.8722
Fax: 905.827.6402
canada.inquires@bio-techne.com

Bio-Techne Ltd

19 Barton Lane
Abingdon Science Park
Abingdon, OX14 3NB, United Kingdom
Phone: (44) (0) 1235 529449
Free Phone: 0800 37 34 15
Fax: (44) (0) 1235 533420
info.EMEA@bio-techne.com

General Contact Information

www.novusbio.com
Technical Support: nb-technical@bio-techne.com
Orders: nb-customerservice@bio-techne.com
General: novus@novusbio.com

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HAF008	Goat anti-Rabbit IgG Secondary Antibody [HRP]
NB7160	Goat anti-Rabbit IgG (H+L) Secondary Antibody [HRP]
NBP2-24891	Rabbit IgG Isotype Control

Limitations

This product is for research use only and is not approved for use in humans or in clinical diagnosis. Primary Antibodies are guaranteed for 1 year from date of receipt.

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