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Datasheet for 600-401-C99

Tyrosine Hydroxylase phospho S40 Antibody

Overview

Description:	Anti-Tyrosine Hydroxylase pS40 (RABBIT) Antibody - 600-401-C99
Item No.:	600-401-C99
Size:	100 µL
Applications:	IHC, WB
Reactivity:	Mouse
Host Species:	Rabbit

Product Details

Background:	Tyrosine Hydroxylase pS40 antibody recognizes Tyrosine hydroxylase (TH) which 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. TH antibodies can also be used to explore basic mechanisms of dopamine and norepinephrine signaling. The activity of TH is also regulated by phosphorylation. Phospho-specific antibodies for the phosphorylation sites on TH can be used to great effect in studying this regulation and in identifying the cells in which TH phosphorylation occurs. Tyrosine Hydroxylase pS40 antibody is ideal for investigators involved in Neuronal Circuitry and disorders, and more generally in Neuroscience.
Synonyms:	Tyrosine 3-monooxygenase, Tyrosine 3-hydroxylase, TH
Host Species:	Rabbit
Clonality:	Polyclonal
Format:	IgG

Target Details

Gene Name:	Th
Reactivity:	Mouse
PTM Specificity:	Phosphorylation

Immunogen Type:	Conjugated Peptide
Immunogen:	Anti-Tyrosine Hydroxylase pS40 Antibody was produced in rabbit by repeated immunizations with synthetic phospho-peptide corresponding to amino acid residues surrounding Ser 40 conjugated to KLH.
Purity/Specificity:	Anti-Tyrosine Hydroxylase pS40 antibody is directed against the phosphorylated form at the pS40 residues and is affinity purified from monospecific antiserum by immunoaffinity purification. Expect reactivity with the following species based on sequence homology: mouse. Cross reactivity from Tyrosine Hydroxylase pS40 from other sources has not been determined.
Relevant Links:	• NCBI - NP_036872.1 • UniProtKB - P04177 • GeneID - 25085

Application Details

Tested Applications:	IHC, WB
Application Note:	Anti-Tyrosine Hydroxylase pS40 antibody is tested for use in ELISA, Western Blotting, and ICC/IHC and suitable for IF. Specific conditions for reactivity should be optimized by the end user. Expect a band of approximately 42/44 kDa in size corresponding to the tyrosine hydroxylase proteins phosphorylated at Ser40 in the appropriate cell lysate or extract. 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.
Assay Dilutions:	All assays should be optimized by the user. Recommended dilutions (if any) may be listed below.
ELISA:	1:10,000
IF:	1:1000
IHC:	1:1000
WB:	1:1000

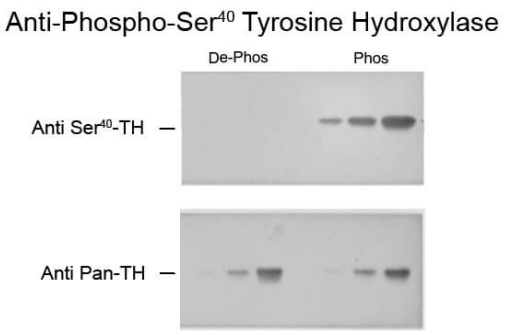
Formulation

Physical State:	Liquid
Buffer:	0.01 M HEPES, 0.15 M Sodium Chloride, pH 7.5
Stabilizer:	0.1 mg/ml Bovine Serum Albumin (BSA) - IgG and Protease free, 50% (v/v) Glycerol

Shipping & Handling

Shipping Condition:	Dry Ice
Storage Condition:	Store vial at -20° C prior to opening. This product is stable at 4° C as an undiluted liquid. For extended storage, aliquot contents and freeze at -20° C or below. Avoid cycles of freezing and thawing. Dilute only prior to immediate use.
Expiration:	Expiration date is one (1) year from date of receipt.

Images



Western blot of phospho- and dephospho-tyrosine hydroxylase demonstrating the selective immunolabeling by the phospho-specific TH ser40 antibody.

Western Blot
Western Blot of Rabbit anti-Tyrosine Hydroxylase Ser40 antibody. Lane 1: De-Phospho-TH (serial dilution). Lane 2: Phospho-TH (serial dilution). Load: 10 µg per lane. Primary antibody: Tyrosine Hydroxylase pS40 antibody at 1:1,000 for overnight at 4°C. Secondary antibody: IRDye800™ rabbit secondary antibody at 1:10,000 for 45 min at RT. Block: 5% BLOTTO overnight at 4°C. Predicted/Observed size: 60 kDa for Tyrosine Hydroxylase Ser40. Other band(s): none.

Disclaimer

This product is for research use only and is not intended for therapeutic or diagnostic applications. Please contact a technical service representative for more information. All products of animal origin manufactured by Rockland Immunochemicals are derived from starting materials of North American origin. Collection was performed in United States Department of Agriculture (USDA) inspected facilities and all materials have been inspected and certified to be free of disease and suitable for exportation. All properties listed are typical characteristics and are not specifications. All suggestions and data are offered in good faith but without guarantee as conditions and methods of use of our products are beyond our control. All claims must be made within 30 days following the date of delivery. The prospective user must determine the suitability of our materials before adopting them on a commercial scale. Suggested uses of our products are not recommendations to use our products in violation of any patent or as a license under any patent of Rockland Immunochemicals, Inc. If you require a commercial license to use this material and do not have one, then return this material, unopened to: Rockland Inc., P.O. BOX 5199, Limerick, Pennsylvania, USA.