

Datasheet for 600-401-E51**Tyrosine Hydroxylase phospho S31 Antibody****Overview**

Description:	Anti-Tyrosine Hydroxylase pS31 (RABBIT) Antibody - 600-401-E51
Item No.:	600-401-E51
Size:	100 µL
Applications:	IHC, WB
Reactivity:	Mouse, Rat
Host Species:	Rabbit

Product Details

Background:	Tyrosine Hydroxylase pS31 Antibody detects phosphorylated Tyrosine Hydroxylase protein. 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. 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.
Synonyms:	Tyrosine 3-monooxygenase, Tyrosine 3-hydroxylase, TH
Host Species:	Rabbit
Clonality:	Polyclonal
Format:	IgG

Target Details

Gene Name:	Th
Reactivity:	Mouse, Rat
PTM Specificity:	Phosphorylation
Immunogen Type:	Conjugated Peptide

Immunogen:	Anti-Tyrosine Hydroxylase pS31 Antibody was produced repeated immunizations with a synthetic phospho-peptide corresponding to amino acid residues surrounding Ser31.
Purity/Specificity:	Anti-Tyrosine Hydroxylase pS31 Antibody is directed against phosphorylated rat Tyrosine Hydroxylase protein. Tyrosine Hydroxylase pS31 antibodies are affinity purified from monospecific antiserum by immunoaffinity purification. Reactivity is expected from the following species based on 100% sequence homology: non-human primates. Cross reactivity from other sources has not been determined.
Relevant Links:	<ul style="list-style-type: none">• UniProtKB - P04177• GeneID - 25085• NCBI - AAA42258.1

Application Details

Tested Applications:	IHC, WB
Application Note:	Anti-Tyrosine Hydroxylase pS31 (Rabbit) antibody is tested for use in Western Blotting, IHC and ICC. Specific conditions for reactivity should be optimized by the end user. Expect a band of approximately 60 kDa in size corresponding to tyrosine hydroxylase protein phosphorylated at Ser31 in the appropriate cell lysate or extract.
Assay Dilutions:	All assays should be optimized by the user. Recommended dilutions (if any) may be listed below.
IF:	1:1000
IHC:	1:1000
WB:	1:1000

Formulation

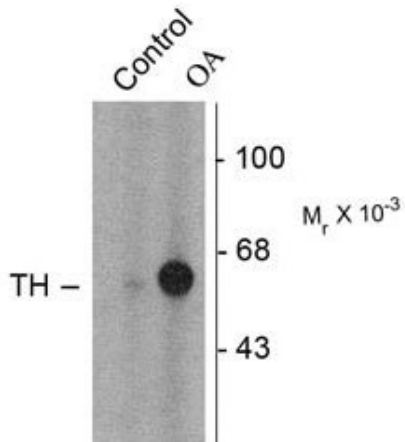
Physical State:	Liquid
Buffer:	0.01 M HEPES, 0.15 M Sodium Chloride, pH 7.5
Stabilizer:	0.1 mg/ml Bovine Serum Albumin (BSA) - IgG and Protease free, 50% (v/v) Glycerol

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

Western Blot of Rabbit anti-Tyrosine Hydroxylase pS31 antibody. Lane 1: PC-12 cells incubated in the absence of okadaic acid (Control). Lane 2: PC-12 cells incubated in the presence of okadaic acid (OA, 1 μ M for 60 min). Load: 10 μ g per lane. Primary antibody: Tyrosine Hydroxylase pS31 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 pS31. 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.