

Datasheet for 600-601-C96**Tryptophan Hydroxylase Antibody****Overview**

Description:	Anti-Tryptophan Hydroxylase (Sheep) Antibody - 600-601-C96
Item No.:	600-601-C96
Size:	100 µL
Applications:	IHC, WB
Reactivity:	Human, Rat
Host Species:	Sheep

Product Details

Background:	Tryptophan Hydroxylase antibody detects Tryptophan Hydroxylase. TPH catalyzes the first step in the biosynthesis of serotonin and melatonin. Thus, expression of TPH can be used as an indicator of the localization of serotonin and melatonin in brain. In mammals, serotonin biosynthesis occurs predominantly in neurons which originate in the Raphe nuclei of the brain, and melatonin synthesis takes place within the pineal gland. Although TPH catalyzes the same reaction within the Raphe nuclei and the pineal gland, TPH activity is rate-limiting for serotonin but not melatonin biosynthesis. Anti-Tryptophan Hydroxylase antibody is ideal for investigators involved in Cell Signaling and Neuroscience research.
Synonyms:	Tryptophan 5-hydroxylase 1, Tryptophan 5-monooxygenase 1
Host Species:	Sheep
Clonality:	Polyclonal
Format:	IgG

Target Details

Gene Name:	TPH1
Reactivity:	Human, Rat
Immunogen Type:	Recombinant Protein
Immunogen:	Anti-Tryptophan Hydroxylase Antibody was produced in sheep by repeated immunizations with recombinant rabbit tryptophan hydroxylase, isolated as inclusion bodies from E. coli and purified by preparative SDS-PAGE.

Purity/Specificity: Anti-Tryptophan Hydroxylase antibody is directed against Tryptophan 5-hydroxylase 1. Tryptophan Hydroxylase antibodies are affinity purified from monospecific antiserum by immunoaffinity purification. Reactivity is expected from the following species based on 100% sequence homology: mammals. Cross reactivity from other sources has not been determined.

Relevant Links:

- [NCBI - NP_001093425.1](#)
- [UniProtKB - P17290](#)
- [GeneID - 100101558](#)

Application Details

Tested Applications: IHC, WB

Application Note: Anti-Tryptophan Hydroxylase (Sheep) antibody is tested for use in Western Blotting and IHC. Specific conditions for reactivity should be optimized by the end user. Expect a band of approximately 55 kDa in size corresponding to tryptophan hydroxylase protein in the appropriate cell lysate or extract. Researchers should determine optimal titers for applications that are not stated below.

Assay Dilutions: All assays should be optimized by the user. Recommended dilutions (if any) may be listed below.

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

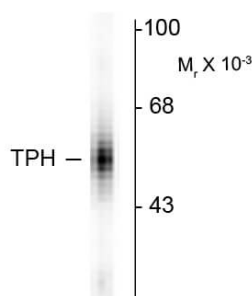
Shipping Condition: Dry Ice

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

Anti-Tryptophan Hydroxylase



Western blot of human dorsal Raphe nucleus showing specific immunolabeling of the ~55k Tryptophan Hydroxylase protein.

Western Blot

Western Blot of Sheep anti-Tryptophan Hydroxylase antibody. Lane 1: human dorsal Raphe nucleus. Lane 2: None. Load: 10 µg per lane. Primary antibody: Tryptophan Hydroxylase antibody at 1:1,000 for overnight at 4°C. Secondary antibody: IRDye800™ sheep secondary antibody at 1:10,000 for 45 min at RT. Block: 5% BLOTTO overnight at 4°C. Predicted/Observed size: 55 kDa for Tryptophan Hydroxylase. 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.