Rabbit anti-Human Tryptophan Hydroxylase/TPH1 Polyclonal Antibody | anti-TPH1 antibody

Anti-Tryptophan Hydroxylase/TPH1 Antibody Picoband

CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA19426	**Rabbit**	**Human**	**ELISA, Flow Cytometry, Functional Assay, Immunofluorescence, Immunohistochemistry, Immunocytochemistry, Western Blot**

PRODUCT SYNONYMS

Tryptophan Hydroxylase/TPH1; Polyclonal Antibody; Anti-Tryptophan Hydroxylase/TPH1 Antibody Picoband; anti-TPH1 antibody

PRODUCT SPECIFICATIONS

Host	Rabbit
Reactivity	Human
Clonality	Polyclonal
Isotype	Rabbit IgG
Specificity	Natural and recombinant Human CD40
Purity/Purification	Immunogen affinity purified.
Form/Format	Lyophilized Each vial contains 4 mg Trehalose, 0.9 mg NaCl, 0.2 mg Na2HPO4.
Concentration	Adding 0.2 ml of distilled water will yield a concentration of 500 ug/ml. (varies by lot)
Applicable Applications for anti-TPH1 antibody	ELISA, FCM/FACS (Flow Cytometry), IF (Immunofluorescence), IHC (Immunohistochemistry), ICC (Immunocytochemistry), WB (Western Blot)
Application Notes	WB: 0.25-0.5 ug/ml, Human IHC-P: 2-5 ug/ml, Human ICC/IF: 5 ug/ml, Human FC/FACS: 1-3 ug/1x10^6 cells, Human Direct ELISA: 0.1-0.5 ug/ml, Human Tested Species: In-house tested species with positive results. Enhanced Chemiluminescent Kit with anti-Rabbit IgG for Western blot, and HRP Conjugated anti-Rabbit IgG Super Vision Assay Kit for IHC(P) and ICC.
Assay Type	Sandwich
Samples	Cell culture supernatants, serum, plasma (heparin, EDTA), saliva, urine and human milk
Detection Range	15.6 pg/ml - 1,000 pg/ml
Sensitivity	<1 pg/ml
Intra-assay Precision	Intra-Assay Precision (Precision within an assay): Three samples of known concentration were tested on one plate to assess intra-assay precision.
Inter-assay Precision	Inter-Assay Precision (Precision across assays): Three samples of known concentration were tested in separate assays to assess inter-assay precision.
Preparation and Storage	Store at -20 degree C for one year from date of receipt. After reconstitution, at 4 degree C for one month. It can also be aliquotted and stored frozen at -20 degree C for six months. Avoid repeated freezing and thawing.

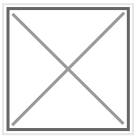
IMAGES

FCM (Flow Cytometry)

Figure 6. Flow Cytometry analysis of HEL cells using anti-Tryptophan Hydroxylase/TPH1 antibody (AAA19426).Overlay histogram showing HEL cells stained with AAA19426 (Blue line). The cells were blocked with 10% normal goat serum. And then incubated with rabbit anti-Tryptophan Hydroxylase/TPH1 Antibody (AAA19426, 1 ug/1x10^6 cells) for 30 min at 20 degree C. DyLight488 conjugated goat anti-rabbit IgG was used as secondary antibody for 30 minutes at 20 degree C. Isotype control antibody (Green line) was rabbit IgG (1 ug/1x10^6) used under the same conditions. Unlabelled sample (Red line) was also used as a control.

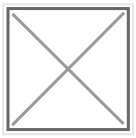
IF (Immunofluorescence)

Figure 5. IF analysis of Tryptophan Hydroxylase/TPH1 using anti-Tryptophan Hydroxylase/TPH1 antibody (AAA19426).Tryptophan Hydroxylase/TPH1 was detected in an immunocytochemical section of A431 cells. Enzyme antigen retrieval was performed using IHC enzyme antigen retrieval reagent (AR0022) for 15 mins. The cells were blocked with 10% goat serum. And then incubated with 5 ug/mL rabbit anti-Tryptophan Hydroxylase/TPH1 Antibody (AAA19426) overnight at 4 degree C. DyLight488 Conjugated Goat Anti-Rabbit IgG was used as secondary antibody at 1:100 dilution and incubated for 30 minutes at 37 degree C. The section was counterstained with DAPI. Visualize using a fluorescence microscope and filter sets appropriate for the label used.



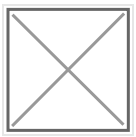
IHC (Immunohistochemistry)

Figure 4. IHC analysis of Tryptophan Hydroxylase/TPH1 using anti-Tryptophan Hydroxylase/TPH1 antibody (AAA19426).Tryptophan Hydroxylase/TPH1 was detected in a paraffin-embedded section of human ovarian cancer tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH 8.0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 2 ug/ml rabbit anti-Tryptophan Hydroxylase/TPH1 Antibody (AAA19426) overnight at 4 degree C. Biotinylated goat anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37 degree C. The tissue section was developed using Strepavidin-Biotin-Complex (SABC) with DAB as the chromogen.



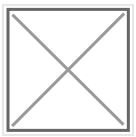
IHC (Immunohistochemistry)

Figure 3. IHC analysis of Tryptophan Hydroxylase/TPH1 using anti-Tryptophan Hydroxylase/TPH1 antibody (AAA19426).Tryptophan Hydroxylase/TPH1 was detected in a paraffin-embedded section of human colonic adenocarcinoma tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH 8.0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 2 ug/ml rabbit anti-Tryptophan Hydroxylase/TPH1 Antibody (AAA19426) overnight at 4 degree C. Biotinylated goat anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37 degree C. The tissue section was developed using Strepavidin-Biotin-Complex (SABC) with DAB as the chromogen.



IHC (Immunohistochemistry)

Figure 2. IHC analysis of Tryptophan Hydroxylase/TPH1 using anti-Tryptophan Hydroxylase/TPH1 antibody (AAA19426).Tryptophan Hydroxylase/TPH1 was detected in a paraffin-embedded section of human bladder epithelial carcinoma tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH 8.0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 2 ug/ml rabbit anti-Tryptophan Hydroxylase/TPH1 Antibody (AAA19426) overnight at 4 degree C. Biotinylated goat anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37 degree C. The tissue section was developed using Strepavidin-Biotin-Complex (SABC) with DAB as the chromogen.



WB (Western Blot)

Figure 1. Western blot analysis of Tryptophan Hydroxylase/TPH1 using anti-Tryptophan Hydroxylase/TPH1 antibody (AAA19426).Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel)/90V (Resolving gel) for 2-3 hours. The sample well of each lane was loaded with 30 ug of sample under reducing conditions.Lane 1: human 293T whole cell lysates,Lane 2: human HL-60 whole cell lysates,Lane 3: human HepG2 whole cell lysates,Lane 4: human Caco-2 whole cell lysates.After electrophoresis, proteins were transferred to a nitrocellulose membrane at 150 mA for 50-90 minutes. Blocked the membrane with 5% non-fat milk/TBS for 1.5 hour at RT. The membrane was incubated with rabbit anti-Tryptophan Hydroxylase/TPH1 antigen affinity purified polyclonal antibody (#AAA19426) at 0.5 ug/mL overnight at 4 degree C, then washed with TBS-0.1%Tween 3 times with 5 minutes each and probed with a goat anti-rabbit IgG-HRP secondary antibody at a dilution of 1:5000 for 1.5 hour at RT. The signal is developed using an Enhanced Chemiluminescent detection (ECL) kit with Tanon 5200 system. A specific band was detected for Tryptophan Hydroxylase/TPH1 at approximately 60 kDa. The expected band size for Tryptophan Hydroxylase/TPH1 is at 60 kDa.

ADDITIONAL INFORMATION

Related Product Information for anti-TPH1 antibody	Background: CD40 is a cell surface receptor that is expressed on the surface of all mature B cells, most mature B-cell malignancies, and some early B-cell acute lymphocytic leukemias, but is not expressed on plasma cells. The CD40 gene is localized to the long arm of chromosome 20, bands q12-q13.2. The protein encoded by this gene is a member of the TNF-receptor superfamily. This receptor has been found to be essential in mediating a broad variety of immune and inflammatory responses including T cell-dependent immunoglobulin class switching, memory B cell development, and germinal center formation. Principle of the Assay: The Quick Picokine™ Human CD40 Pre-Coated ELISA (Enzyme-Linked Immunosorbent Assay) kit is a solid phase immunoassay specially designed to measure Human CD40 in cell culture supernatants, serum, plasma (heparin, EDTA), saliva, urine and human milk. It uses our proprietary Quick ELISA technology. Quick ELISA technology employs capture antibodies conjugated to an affinity tag that is recognized by the polyclonal antibody used to coat our Quick ELISA plates. This approach to sandwich ELISA allows the formation of the antibody-analyte sandwich complex in a single step, significantly reducing assay time. The kit contains recombinant Human CD40 with immunogen: Expression system for standard: NS0; Immunogen sequence: E21-R193. To measure Human CD40, add standards and samples to the wells, then add antibody cocktail. Wash the wells with PBS or TBS buffer, and add TMB. TMB is an HRP substrate and will be catalyzed to produce a blue color product, which changes into yellow after adding the acidic stop solution. The absorbance of the yellow product is linearly proportional to Human CD40 in the sample. Read the absorbance of the yellow product in each well using a plate reader, and benchmark the sample wells' readings against the standard curve to determine the concentration of Human CD40 in the sample.
Product Categories/Family for anti-TPH1 antibody	Primary Antibodies, Rabbit Polyclonal Antibodies

NCBI AND UNIPROT INFORMATION

NCBI GI #	4759248
NCBI GeneID	7166
NCBI Accession #	NP_004170.1
NCBI GenBank Nucleotide #	NM_004179.2
UniProt Accession #	P17752; O95188; O95189; Q16736; Q3KPG8; D3DQX6
Molecular Weight	50,985 Da
NCBI Official Full Name	tryptophan 5-hydroxylase 1
NCBI Official Synonym Full Names	tryptophan hydroxylase 1
NCBI Official Symbol	TPH1
NCBI Official Synonym Symbols	TPRH; TRPH
NCBI Protein Information	tryptophan 5-hydroxylase 1; L-tryptophan hydroxylase; tryptophan 5-monooxygenase 1; indoleacetic acid-5-hydroxylase; tryptophan hydroxylase (tryptophan 5-monooxygenase)
UniProt Protein Name	Tryptophan 5-hydroxylase 1
UniProt Gene Name	**TPH1**
UniProt Synonym Gene Names	TPH; TPRH; TRPH
UniProt Entry Name	TPH1_HUMAN

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

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Online datasheet: https://stage.aaabiotech.com/polyclonal/tryptophan-hydroxylase-tph1-antibody-flow-cytometry-immunofluorescence-immunohistochemistry-immunocytochemistry-western-blot-elisa/19426