

## Anti-Tryptophan Hydroxylase/TPH1 Antibody Picoband®

Catalog Number: A01626-1

### About TPH1

Tryptophan hydroxylase 1 (TPH1) is an isoenzyme of tryptophan hydroxylase which in humans is encoded by the TPH1 gene. This gene encodes a member of the aromatic amino acid hydroxylase family. The encoded protein catalyzes the first and rate limiting step in the biosynthesis of serotonin, an important hormone and neurotransmitter. Mutations in this gene have been associated with an elevated risk for a variety of diseases and disorders, including schizophrenia, somatic anxiety, anger-related traits, bipolar disorder, suicidal behavior, addictions, and others.

### Overview

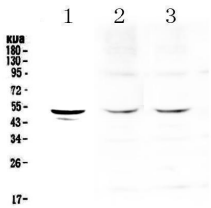
Product Name	Anti-Tryptophan Hydroxylase/TPH1 Antibody Picoband®
Reactive Species	Human, Mouse, Rat
Description	Boster Bio Anti-Tryptophan Hydroxylase/TPH1 Antibody Picoband® catalog # A01626-1. Tested in ELISA, WB applications. This antibody reacts with Human, Mouse, Rat. The brand Picoband indicates this is a premium antibody that guarantees superior quality, high affinity, and strong signals with minimal background in Western blot applications. Only our best-performing antibodies are designated as Picoband, ensuring unmatched performance.
Application	ELISA, WB
Clonality	Polyclonal
Formulation	Each vial contains 4mg Trehalose, 0.9mg NaCl, 0.2mg Na2HPO4, 0.05mg NaN3.
Storage Instructions	Store at -20°C for one year from date of receipt. After reconstitution, at 4°C for one month. It can also be aliquotted and stored frozen at -20°C for six months. Avoid repeated freeze-thaw cycles.
Host	Rabbit
Uniprot ID	P17752

### Technical Details

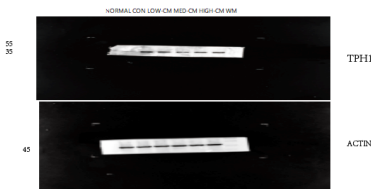
Immunogen	E. coli-derived human Tryptophan Hydroxylase recombinant protein (Position: M1-K111).
Recommended Detection Systems	Boster recommends Enhanced Chemiluminescent Kit with anti-Rabbit IgG (EK1002) for Western blot.
Cross Reactivity	No cross-reactivity with other proteins.
Isotype	Rabbit IgG
Form	Lyophilized
Concentration	Adding 0.2 ml of distilled water will yield a concentration of 500 ug/ml.

Purification	Immunogen affinity purified.
Suggested Dilutions	Western blot, 0.1-0.5ug/ml ELISA, 0.1-0.5ug/ml

## Anti-Tryptophan Hydroxylase/TPH1 Antibody Picoband® (A01626-1) Images



Western blot analysis of Tryptophan Hydroxylase using anti-Tryptophan Hydroxylase antibody (A01626-1). 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 50ug of sample under reducing conditions. Lane 1: human SGC-7901 whole cell lysates, Lane 2: rat heart tissue lysates, Lane 3: mouse heart tissue lysates. After Electrophoresis, proteins were transferred to a Nitrocellulose membrane at 150mA 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 antigen affinity purified polyclonal antibody (Catalog # A01626-1) at 0.5 ug/mL overnight at 4°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 1:10000 for 1.5 hour at RT. The signal is developed using an Enhanced Chemiluminescent detection (ECL) kit (Catalog # EK1002) with Tanon 5200 system. A specific band was detected for Tryptophan Hydroxylase at approximately 51KD. The expected band size for Tryptophan Hydroxylase is at 51KD.



Western blot analysis of Tryptophan Hydroxylase using anti-Tryptophan Hydroxylase antibody (A01626-1). 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 50ug of sample under reducing conditions. Lane 1: normal group-rat colon tissue lysates, Lane 2: control group-model rat colon tissue lysates, Lane 3: low dose Chinese medicine group-model rat colon tissue lysates, Lane 4: medium dose Chinese medicine group-model rat colon tissue lysates, Lane 5: high dose Chinese medicine group-model rat colon tissue lysates, Lane 6: western medicine group-model rat colon tissue lysates. After Electrophoresis, proteins were transferred to a Nitrocellulose membrane at 150mA 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 antigen affinity purified polyclonal antibody (Catalog # A01626-1) at 1:1000 overnight at 4°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 hour at RT. The signal is developed using an Enhanced Chemiluminescent detection (ECL) kit (Catalog # EK1002) with ChemiDoc MP system. The expected band size for Tryptophan Hydroxylase is at 51KD.

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Anti-Tryptophan Hydroxylase/TPH1 Antibody

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