



Rabbit Anti-TPH antibody

SL1215R

Product Name TPH**Chinese Name** 色氨酸羟化酶抗体**Alias** MGC119994; TPH 1; TPH; TPH1; TPRH; Tryptophan 5 hydroxylase 1; Tryptophan 5 monooxygenase 1; Tryptophan 5 monooxygenase; Tryptophan hydroxylase 1; Tryptophan 5-hydroxylase 1; TPH1_HUMAN.**Research Area** Cell biology Neurobiology Signal transduction**Immunogen Species** Rabbit**Clonality** Polyclonal**React Species** Mouse,Rat(predicted:Human,Chicken,Dog,Horse,Rabbit)**Applications** WB=1:500-2000,IHC-P=1:100-500,IHC-F=1:100-500,IF=1:100-500 (Paraffin sections need antigen repair)
not yet tested in other applications.
optimal dilutions/concentrations should be determined by the end user.**Theoretical molecular weight** 49kDa**Cellular localization** cytoplasmic**Form** Liquid**Concentration** 1mg/ml**immunogen** KLH conjugated synthetic peptide derived from human TPH: 31-150/444**Lsotype** IgG**Purification** affinity purified by Protein A**Buffer Solution** Mouse,Rat(predicted:Human,Chicken,Dog,Horse,Rabbit)1M TBS(pH7.4) with 1% BSA, Mouse,Rat(predicted:Human,Chicken,Dog,Horse,Rabbit)3% Proclin300 and 50% Glycerol.**Storage** Shipped at 4°C. Store at -20 °C for one year. Avoid repeated freeze/thaw cycles.**Attention** This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.

PubMed

[PubMed](#)

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.[provided by RefSeq, Apr 2009].

Subunit:

Homotetramer.

Tissue Specificity:

Isoform 2 seems to be less widely expressed than isoform 1.

Similarity:

Belongs to the bipterin-dependent aromatic amino acid hydroxylase family. Contains 1 ACT domain.

SWISS:

P17752

**Product
Detail**

Gene ID:

7166

Database links:

[Entrez Gene: 7166](#) Human

[Entrez Gene: 21990](#) Mouse

[Entrez Gene: 24848](#) Rat

[Omim: 191060](#) Human

[SwissProt: P17752](#) Human

[SwissProt: P17532](#) Mouse

[SwissProt: P09810](#) Rat

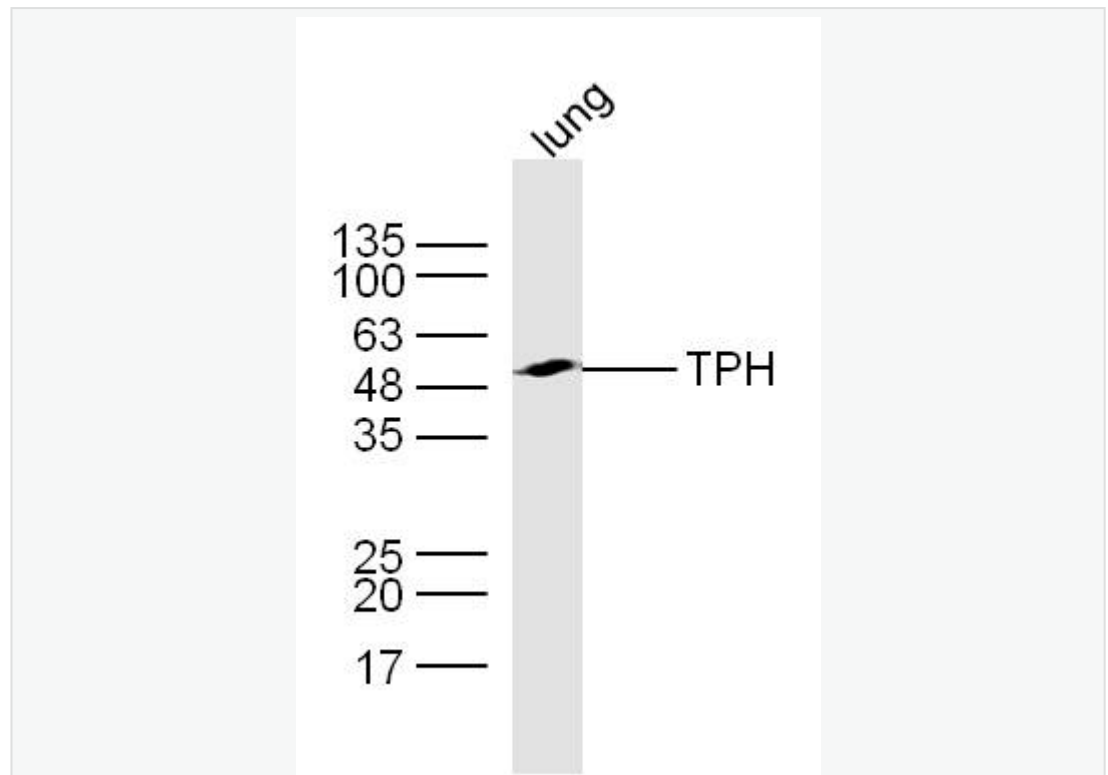
[Unigene: 591999](#) Human

[Unigene: 248684](#) Mouse

[Unigene: 94788](#) Rat

色氨酸在脑中首先由色氨酸羟化酶(tryptophan hydroxylase)催化生成 5 羟色氨酸 (5-hydroxytryptophan), 再经脱羧酶作用生成 5 羟色胺, 色氨酸羟化酶 (TPH) 是 5-HT 生物合成的限速酶, 因此, 色氨酸羟化酶的缺少可导致 5-羟色胺的含量下降。色氨酸羟化酶主要在肝脏内代谢。

**Product
Picture**



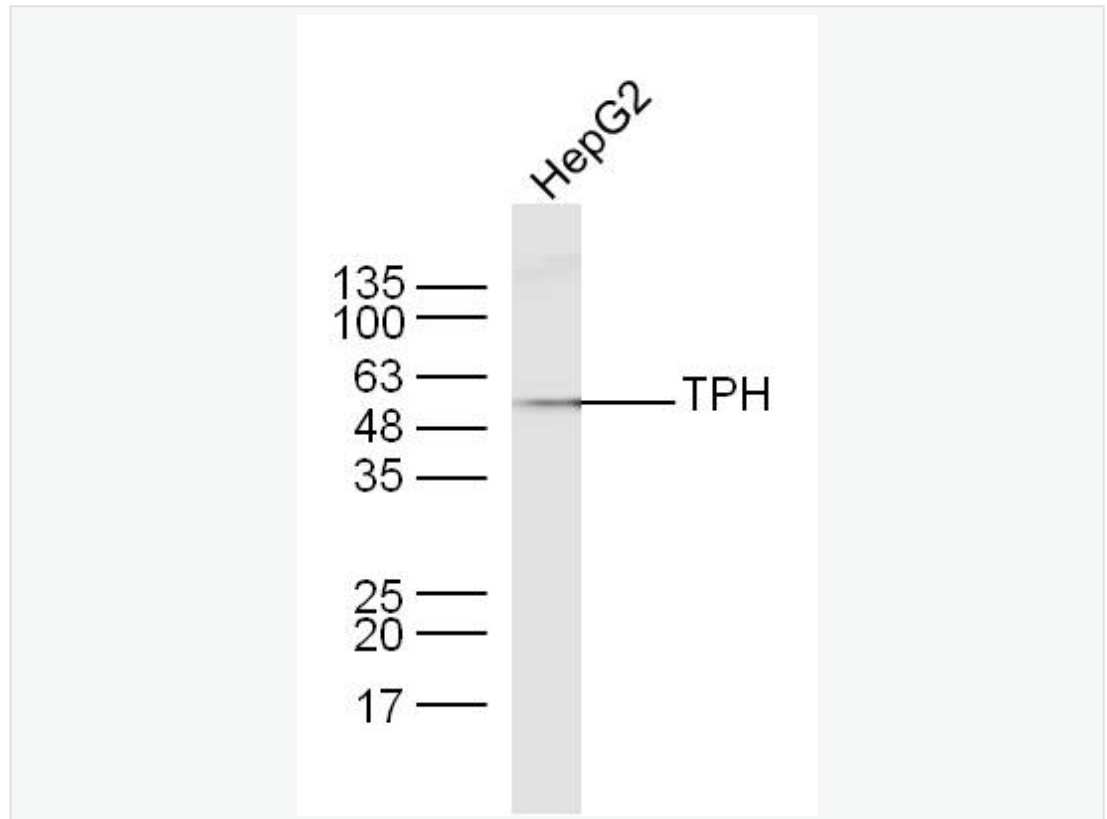
Sample: Lung (Mouse)Lysate at 40 ug

Primary: Anti-TPH(SL1215R) at 1/300 dilution

Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution

Predicted band size: 49 kD

Observed band size: 49kD



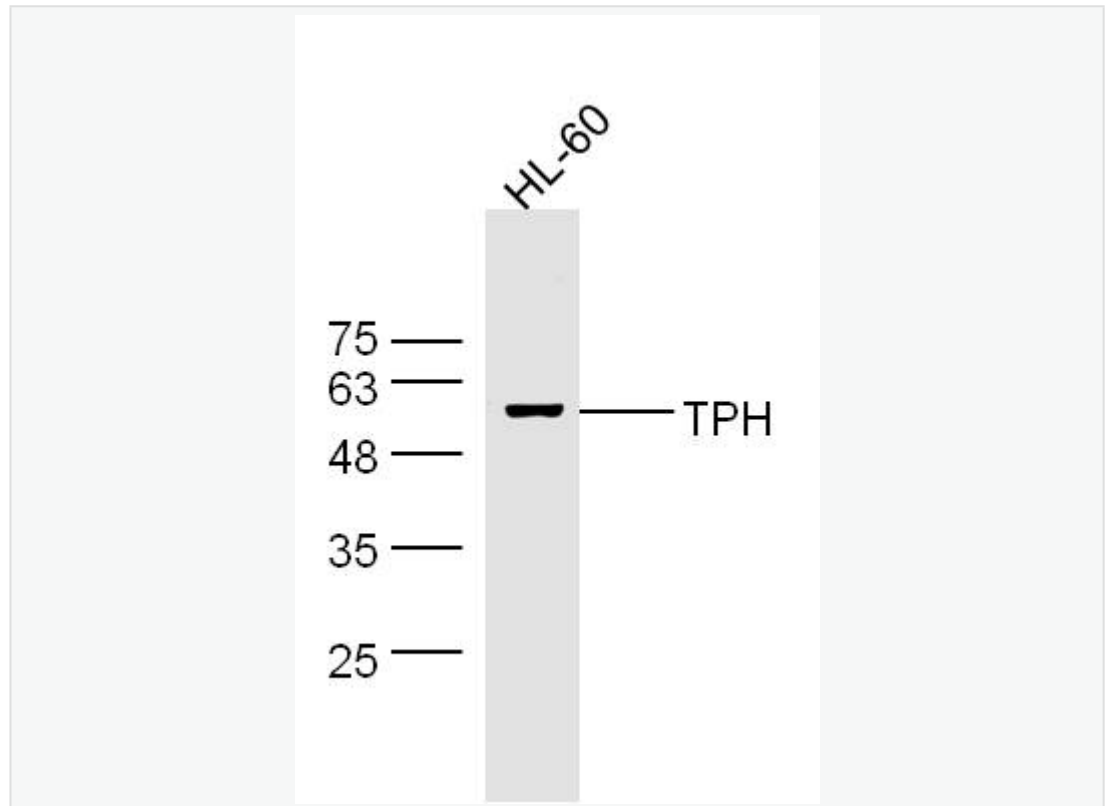
Sample: HL60/HepG2/K562 Cell Lysate at 40 ug

Primary: Anti- TPH(SL1215R) at 1/300 dilution

Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution

Predicted band size: 49 kD

Observed band size: 53kD



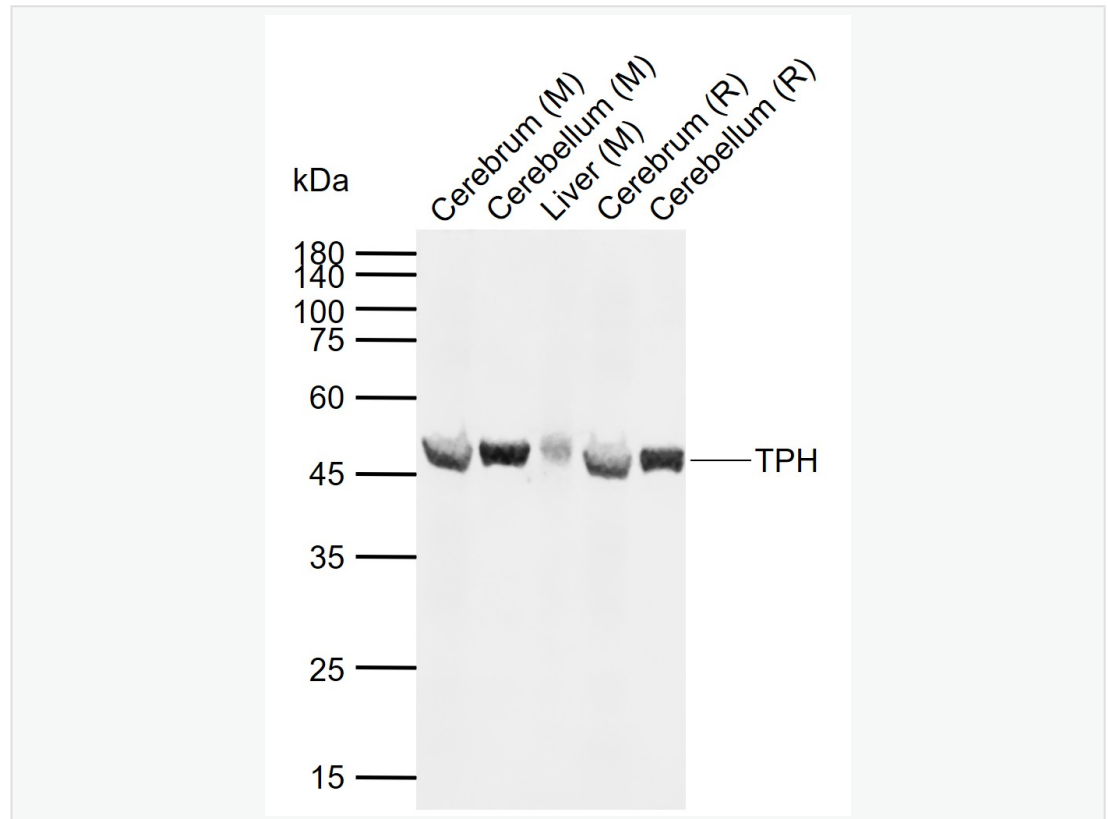
Sample: HL60/HepG2/K562 Cell Lysate at 40 ug

Primary: Anti- TPH(SL1215R) at 1/300 dilution

Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution

Predicted band size: 49 kD

Observed band size: 54 kD



Sample:

Lane 1: Mouse Cerebrum tissue lysates

Lane 2: Mouse Cerebellum tissue lysates

Lane 3: Mouse Liver tissue lysates

Lane 4: Rat Cerebrum tissue lysates

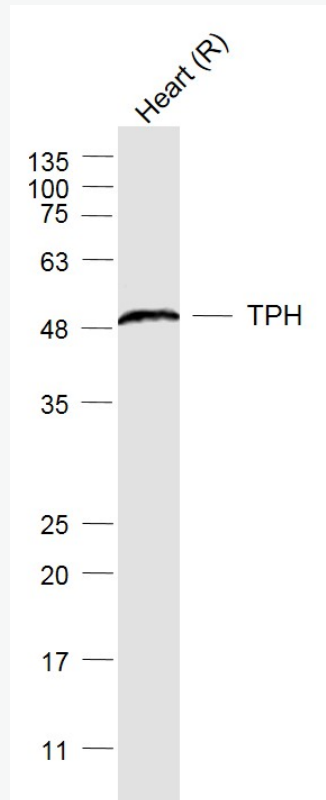
Lane 5: Rat Cerebellum tissue lysates

Primary: Anti-TPH (SL1215R) at 1/1000 dilution

Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution

Predicted band size: 49 kDa

Observed band size: 49 kDa



Sample:

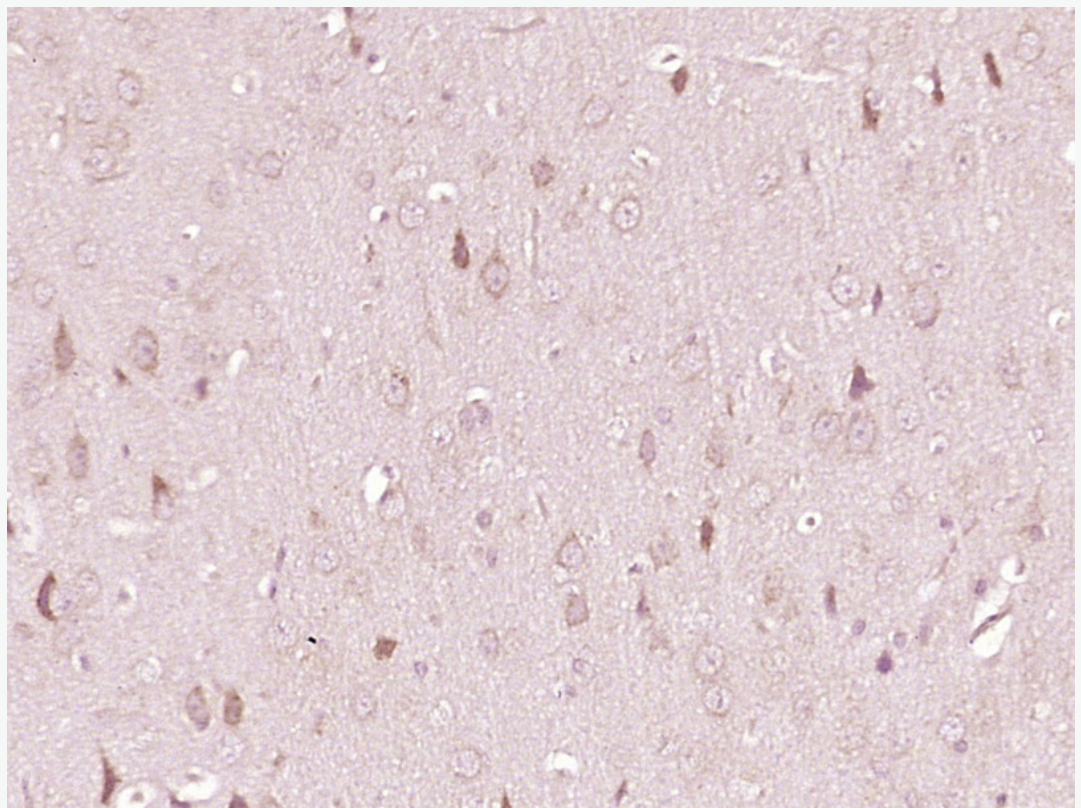
Heart (Rat) Lysate at 40 ug

Primary: Anti-TPH (SL1215R) at 1/1000 dilution

Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution

Predicted band size: 49 kD

Observed band size: 49 kD



Paraformaldehyde-fixed, paraffin embedded (Rat brain); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (TPH) Polyclonal Antibody, Unconjugated (SL1215R) at 1:400 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructions and DAB staining.