



Rabbit Anti-TPH2 antibody

SL8729R

Product Name:	TPH2
Chinese Name:	5色氨酸羟化酶2抗体
Alias:	ADHD7; Neuronal tryptophan hydroxylase; NTPH; TPH 2; Tph2; TPH2_HUMAN; Tryptophan 5-hydroxylase 2; Tryptophan 5-monooxygenase 2; Tryptophan hydroxylase 2.
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human,Mouse,Rat,Cow,Horse,
Applications:	WB=1:500-2000ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800ICC=1:100-500IF=1:100-500 (Paraffin sections need antigen repair) not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Molecular weight:	54kDa
Form:	Lyophilized or Liquid
Concentration:	1mg/ml
immunogen:	KLH conjugated synthetic peptide derived from human TPH2:201-300/490
Lsotype:	IgG
Purification:	affinity purified by Protein A
Storage Buffer:	0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.
Storage:	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year when kept at -20°C. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.
PubMed:	PubMed
Product Detail:	Phenylalanine hydroxylase (PAH), tyrosine hydroxylase (TH), tryptophan hydroxylase (TPH) and tryptophan hydroxylase 2 (TPH2) comprise a small family of monooxygenases that catalyze the rate-limiting step in the catabolism of aromatic L-amino acids and utilize tetrahydropterine as a cofactor. TPH2 is highly expressed in the central nervous system (CNS), mainly in the brain. TPH2 catalyzes the first step in the biosynthesis of serotonin in the CNS and melatonin in the pineal gland, and may be

involved in the pathology of several neuropsychiatric disorders. Glucocorticoid-mediated reduction of TPH2 is associated with the etiology of mood disorders, specifically psychotic major depression, and TPH2 may be related to dysregulation of serotonin neurotransmission in the brain which commonly leads to suicidal behavior.

Tissue Specificity:

Brain specific.

DISEASE:

Genetic variation in TPH2 may influence susceptibility to major depressive disorder (MDD) [MIM:608516]. Defects in TPH2 are the cause of susceptibility to attention deficit-hyperactivity disorder type 7 (ADHD7) [MIM:613003]. ADHD is a neurobehavioral developmental disorder and is primarily characterized by the co-existence of attentional problems and hyperactivity, with each behavior occurring infrequently alone. Note=Naturally occurring variants of TPH2 with impaired enzyme activity could cause deficiency of serotonin production and result in an increased risk of developing behavioral disorders.

Similarity:

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

SWISS:

Q8IWU9

Gene ID:

121278

Database links:

[Entrez Gene: 121278](#)Human

[Entrez Gene: 216343](#)Mouse

[Entrez Gene: 317675](#)Rat

[Omim: 607478](#)Human

[SwissProt: Q2KIQ5](#)Cow

[SwissProt: Q8IWU9](#)Human

[SwissProt: Q8CGV2](#)Mouse

[SwissProt: Q8CGU9](#)Rat

[Unigene: 376337](#)Human

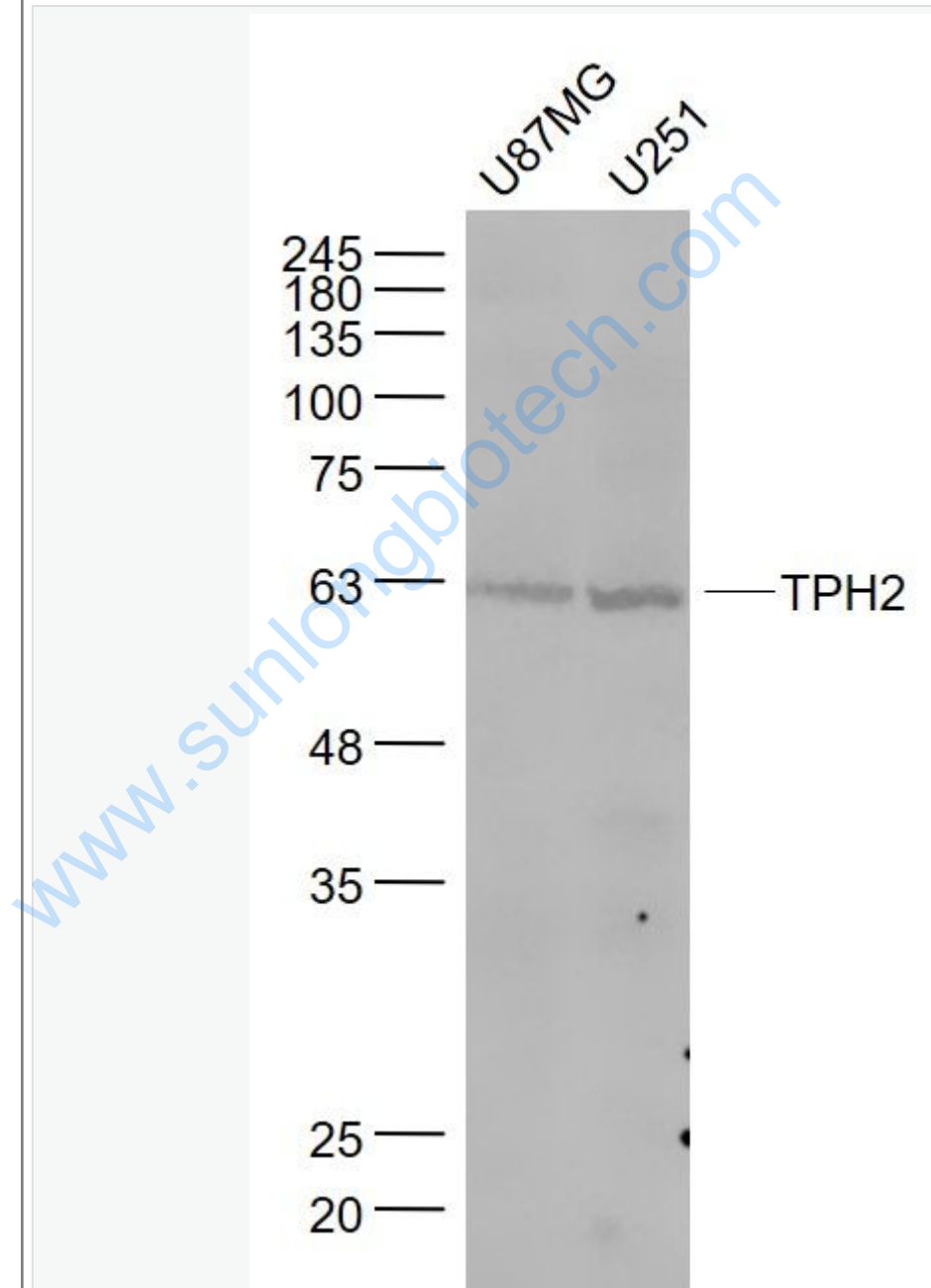
[Unigene: 31597](#)Mouse

[Unigene: 28510Rat](#)

Important Note:

This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.

Picture:



Sample:

U87MG(Human) Cell Lysate at 30 ug

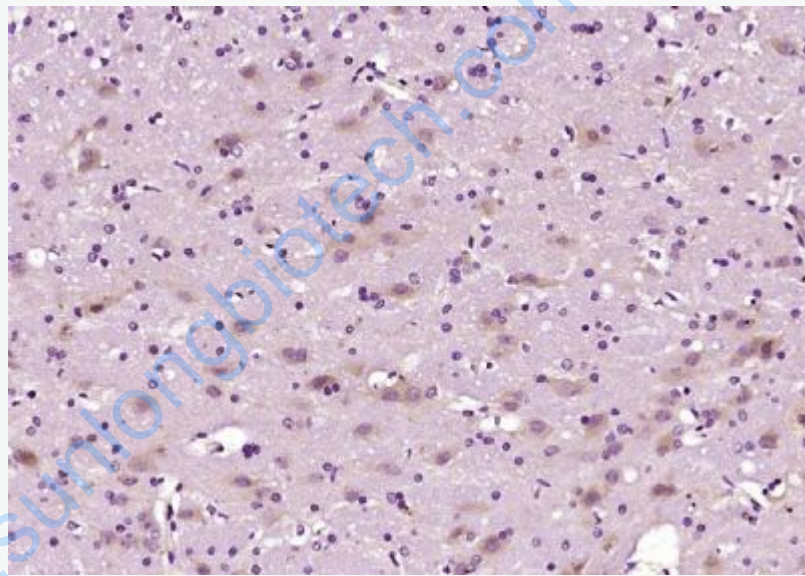
U251(Human) Cell Lysate at 30 ug

Primary: Anti- TPH2 (SL8729R) at 1/1000 dilution

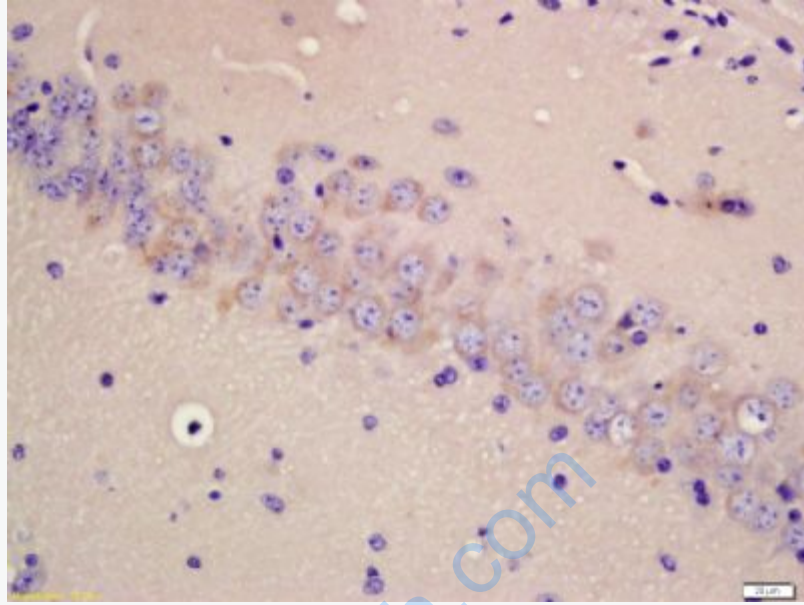
Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution

Predicted band size: 54 kD

Observed band size: 60 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 (TPH2) Polyclonal Antibody, Unconjugated (SL8729R) at 1:200 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructions and DAB staining.



Tissue/cell: rat brain tissue; 4% Paraformaldehyde-fixed and paraffin-embedded;
Antigen retrieval: citrate buffer (0.01M, pH 6.0), Boiling bathing for 15min; Block endogenous peroxidase by 3% Hydrogen peroxide for 30min; Blocking buffer (normal goat serum,C-0005) at 37°C for 20 min;
Incubation: Anti- TPH2 Polyclonal Antibody, Unconjugated(SL8729R) 1:200, overnight at 4°C, followed by conjugation to the secondary antibody(SP-0023) and DAB(C-0010) staining