SunLong Biotech Co.,LTD
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[Primary Antibody]

Rabbit Anti-TPH2 antibody

Catalog Number: SL8729R

FOR RESEARCH USE ONLY

[DATASHEET]

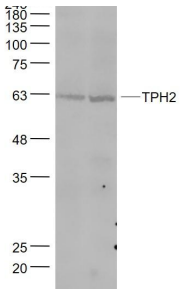
Host:	Rabbit
Isotype:	IgG
Clonality:	Polyclonal
Target:	TPH2
Immunogen:	KLH conjugated synthetic peptide derived from human TPH2: 201-300/490
Purification:	affinity purified by Protein A
Concentration:	1mg/ml
Storage:	0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol. Shipped at 4℃. Store at -20 °C for one year. Avoid repeated freeze/thaw cycles.
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.
Reactivity:	Human,Rat(predicted:Mouse,Cow,Horse)
Predicted MW.:	54kDa
Background:	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.

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

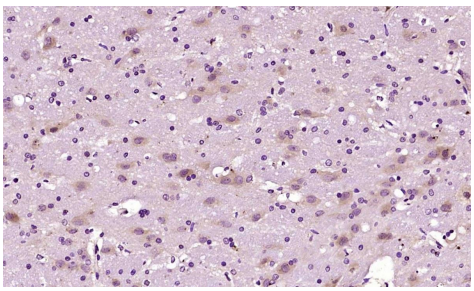
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	DISEASE: Genetic variation in TPH2 may influence susceptibility to major depressive disorder (MDD) [MIM:608516]. Defects in TPH2 are the cause of susceptibility to attention deficit-hyperactivity disorder type 7 (ADHD7) [MIM:613003]. ADHD is a neurobehavioral 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 biopterin-dependent aromatic amino acid hydroxylase family. Contains 1 ACT domain. **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:** 28510 Rat

[VALIDATION IMAGES]



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) instructionsand DAB staining.

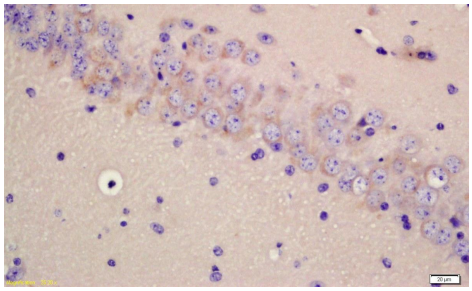
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Tissue/cell: rat brain tissue; 4% Paraformaldehyde-fixed and paraffin-embedded;
Antigen retrieval: citrate buffer (1M, pH 6.0), Boiling bathing for 15min; Block endogenous peroxidase by 3% Hydrogen peroxide for 30min; Blocking buffer (normal goat serum,C-0005) at 37℃ 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

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