

TPH2 Polyclonal antibody

Catalog Number: 29283-1-AP

Basic Information

Catalog Number: 29283-1-AP	GenBank Accession Number: BC114442	Purification Method: Antigen affinity purification
Concentration: 270 ug/ml	GeneID (NCBI): 121278	Recommended Dilutions: WB: 1:500-1:1000 IHC: 1:50-1:500
Source: Rabbit	UNIPROT ID: Q8IWU9	
Isotype: IgG	Full Name: tryptophan hydroxylase 2	
Immunogen Catalog Number: AG30281	Calculated MW: 490 aa, 56 kDa Observed MW: 55 kDa	

Applications

Tested Applications: WB, IHC, ELISA	Positive Controls:
Species Specificity: human, mouse, rat	WB : rat brain tissue, mouse brain tissue IHC : mouse brain tissue, rat brain tissue
Note-IHC: suggested antigen retrieval with <i>TE buffer pH 9.0; (*) Alternatively, antigen retrieval may be performed with citrate buffer pH 6.0</i>	

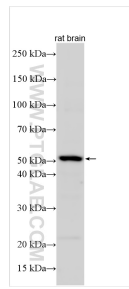
Background Information

TPH2 protein is a key enzyme in the synthesis of serotonin in the brain. It is mainly expressed in the brain and is responsible for converting tryptophan to 5-hydroxytryptophan, a precursor of serotonin. TPH2 plays a crucial role in regulating mood, anxiety, and stress responses. Variations in the TPH2 gene have been associated with several psychiatric disorders, including depression and bipolar disorder. Additionally, TPH2 expression can be regulated by various factors, such as hormones and environmental stimuli (PMID: 22241550, PMID: 29775696, PMID: 32119710, PMID: 40204433).

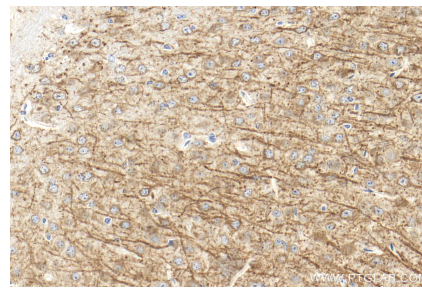
Storage

Storage:
Store at -20°C. Stable for one year after shipment.
Storage Buffer:
PBS with 0.02% sodium azide and 50% glycerol, pH7.3
Aliquoting is unnecessary for -20°C storage

Selected Validation Data



Rat brain tissue were subjected to SDS PAGE followed by western blot with 29283-1-AP (TPH2 antibody) at dilution of 1:500 incubated at room temperature for 1.5 hours.



Immunohistochemical analysis of paraffin-embedded mouse brain tissue slide using 29283-1-AP (TPH2 antibody) at dilution of 1:200 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).