For Research Use Only

TPH2 Polyclonal antibody

Catalog Number: 29283-1-AP



Basic Information

Catalog Number: GenBank Accession Number:

29283-1-AP BC114442 GeneID (NCBI): Size: 150ul , Concentration: 270 µg/ml by 121278

Nanodrop: **UNIPROT ID:** Q8IWU9 Rabbit Full Name:

Isotype: tryptophan hydroxylase 2

IgG Calculated MW: Immunogen Catalog Number: 490 aa, 56 kDa AG30281 Observed MW:

55 kDa

Purification Method: Antigen affinity purification Recommended Dilutions: WB: 1:500-1:1000 IHC: 1:50-1:500

Applications

Tested Applications: WB, IHC, ELISA

Species Specificity: human, mouse, rat

Note-IHC: suggested antigen retrieval with TE buffer pH 9.0; (*) Alternatively, antigen retrieval may be performed with citrate

buffer pH 6.0

Positive Controls:

WB: rat brain tissue, mouse brain tissue IHC: mouse brain tissue, rat brain tissue

Background Information

TPH2 protein is a key enzyme in the synthesis of serotonin in the brain. It is mainly expressed in the brainstem raphe nuclei 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

Store at -20°C. Stable for one year after shipment.

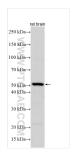
Storage Buffer:

PBS with 0.02% sodium azide and 50% glycerol, pH7.3 $\,$

Aliquoting is unnecessary for -20°C storage

*** 20ul sizes contain 0.1% BSA

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 paraffinembedded 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).