

## **TPH1 Polyclonal Antibody**

Catalog No: YT4710

Reactivity: Human; Mouse; Rat

**Applications:** WB;IHC;IF;ELISA

Target: Tryptophan Hydroxylase

**Fields:** >>Tryptophan metabolism;>>Folate biosynthesis;>>Metabolic

pathways;>>Serotonergic synapse

Gene Name: TPH1

**Protein Name:** Tryptophan 5-hydroxylase 1

P17752

P17532

Human Gene Id: 7166

**Human Swiss Prot** 

No:

Mouse Gene Id: 21990

**Mouse Swiss Prot** 

No:

Rat Gene Id: 24848

Rat Swiss Prot No: P09810

**Immunogen :** The antiserum was produced against synthesized peptide derived from human

Tryptophan Hydroxylase. AA range:231-280

**Specificity:** TPH1 Polyclonal Antibody detects endogenous levels of TPH1 protein.

**Formulation :** Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.

Source: Polyclonal, Rabbit, IgG

**Dilution:** WB 1:500 - 1:2000. IHC 1:100 - 1:300. IF 1:200 - 1:1000. ELISA: 1:20000. Not

yet tested in other applications.



**Purification:** The antibody was affinity-purified from rabbit antiserum by affinity-

chromatography using epitope-specific immunogen.

**Concentration**: 1 mg/ml

Storage Stability: -15°C to -25°C/1 year(Do not lower than -25°C)

Observed Band: 51kD

**Cell Pathway :** Tryptophan metabolism;

**Background :** 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

20091.

**Function:** catalytic activity:L-tryptophan + tetrahydrobiopterin + O(2) = 5-hydroxy-L-

tryptophan + 4a-hydroxytetrahydrobiopterin.,cofactor:Fe(2+)

ion.,pathway:Aromatic compound metabolism; serotonin biosynthesis; serotonin from L-tryptophan: step 1/2.,similarity:Belongs to the biopterin-dependent

aromatic amino acid hydroxylase family.,similarity:Contains 1 ACT

domain., subunit: Multimer of identical subunits., tissue specificity: Isoform 2 seems

to be less widely expressed than isoform 1.,

Subcellular Location:

cytosol, neuron projection,

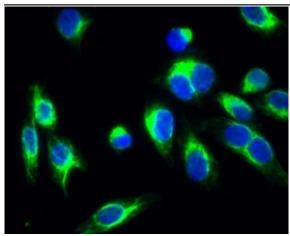
**Expression:** [Isoform 2]: Seems to be less widely expressed than isoform 1.

Tag: orthogonal

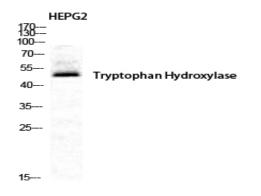
**Sort :** 23452

No4:

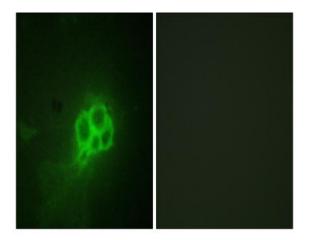
## **Products Images**



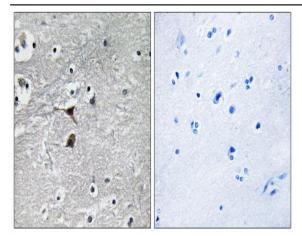
Immunofluorescence analysis of Hela cell. 1,TPH1 Polyclonal Antibody(green) was diluted at 1:200(4° overnight). 2, Goat Anti Rabbit Alexa Fluor 488 Catalog:RS3211 was diluted at 1:1000(room temperature, 50min). 3 DAPI(blue) 10min.



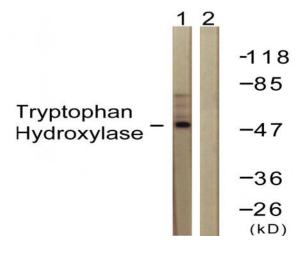
Western Blot analysis of HepG2 cells using TPH1 Polyclonal Antibody diluted at 1:500. Secondary antibody(catalog#:RS0002) was diluted at 1:20000



Immunofluorescence analysis of HUVEC cells, using Tryptophan Hydroxylase Antibody. The picture on the right is blocked with the synthesized peptide.



Immunohistochemistry analysis of paraffin-embedded human brain tissue, using Tryptophan Hydroxylase Antibody. The picture on the right is blocked with the synthesized peptide.



Western blot analysis of lysates from Jurkat cells, using Tryptophan Hydroxylase Antibody. The lane on the right is blocked with the synthesized peptide.