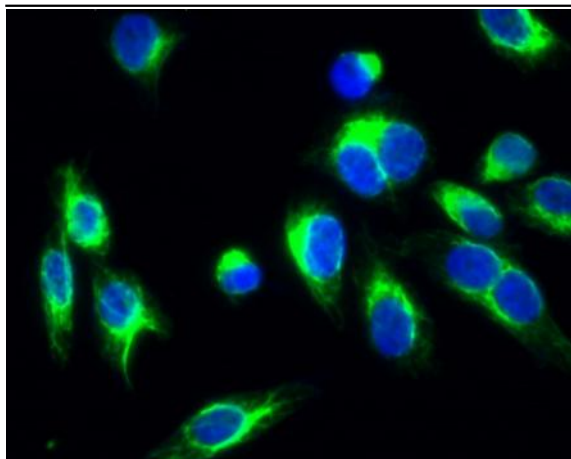


## TPH1 Polyclonal Antibody

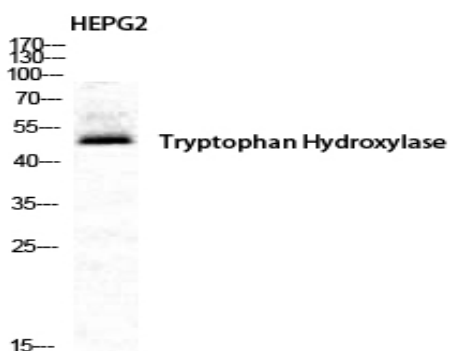
<b>Catalog No :</b>	YT4710
<b>Reactivity :</b>	Human;Mouse;Rat
<b>Applications :</b>	WB;IHC;IF;ELISA
<b>Target :</b>	Tryptophan Hydroxylase
<b>Fields :</b>	>>Tryptophan metabolism;>>Folate biosynthesis;>>Metabolic pathways;>>Serotonergic synapse
<b>Gene Name :</b>	TPH1
<b>Protein Name :</b>	Tryptophan 5-hydroxylase 1
<b>Human Gene Id :</b>	7166
<b>Human Swiss Prot No :</b>	P17752
<b>Mouse Gene Id :</b>	21990
<b>Mouse Swiss Prot No :</b>	P17532
<b>Rat Gene Id :</b>	24848
<b>Rat Swiss Prot No :</b>	P09810
<b>Immunogen :</b>	The antiserum was produced against synthesized peptide derived from human Tryptophan Hydroxylase. AA range:231-280
<b>Specificity :</b>	TPH1 Polyclonal Antibody detects endogenous levels of TPH1 protein.
<b>Formulation :</b>	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
<b>Source :</b>	Polyclonal, Rabbit,IgG
<b>Dilution :</b>	WB 1:500 - 1:2000. IHC 1:100 - 1:300. IF 1:200 - 1:1000. ELISA: 1:20000. Not yet tested in other applications.

<b>Purification :</b>	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.
<b>Concentration :</b>	1 mg/ml
<b>Storage Stability :</b>	-15°C to -25°C/1 year(Do not lower than -25°C)
<b>Observed Band :</b>	51kD
<b>Cell Pathway :</b>	Tryptophan metabolism;
<b>Background :</b>	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 2009],
<b>Function :</b>	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.,
<b>Subcellular Location :</b>	cytosol,neuron projection,
<b>Expression :</b>	[Isoform 2]: Seems to be less widely expressed than isoform 1.
<b>Tag :</b>	orthogonal
<b>Sort :</b>	23452
<b>No4 :</b>	1
<b>Host :</b>	Rabbit
<b>Modifications :</b>	Unmodified

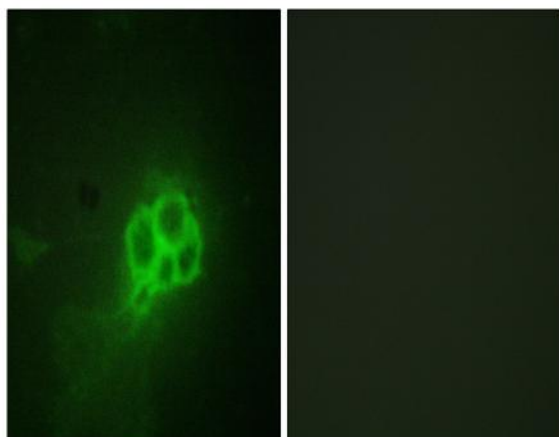
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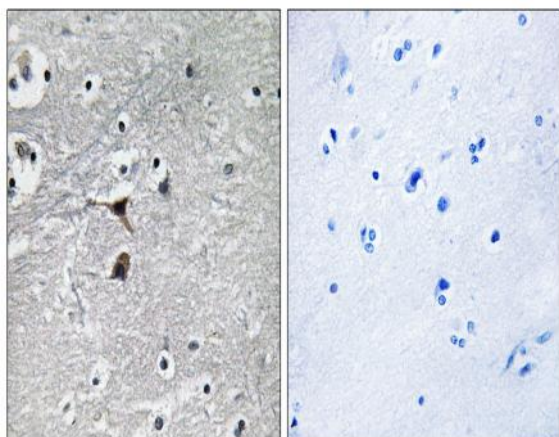
Immunofluorescence analysis of HeLa cell. 1,TPH1 Polyclonal Antibody(green) was diluted at 1:200(4 ° overnight). 2, Goat Anti Rabbit Alexa Fluor 488 Catalog:RS3211 was diluted at 1:1000(room temperature, 50min). 3 DAPI(blue) 10min.



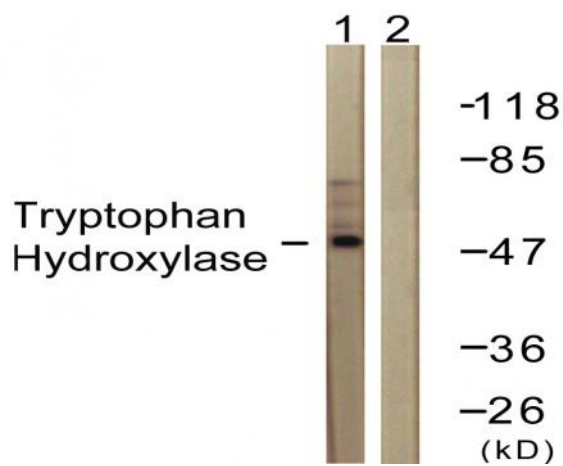
Western Blot analysis of HepG2 cells using TPH1 Polyclonal Antibody diluted at 1:500. Secondary antibody(catalog#:RS0002) was diluted at 1:20000



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.