



# TPH1 Polyclonal Antibody

<b>Catalog No</b>	BYab-02801
<b>Isotype</b>	IgG
<b>Reactivity</b>	Human;Mouse;Rat
<b>Applications</b>	WB;IHC;IF;ELISA
<b>Gene Name</b>	TPH1
<b>Protein Name</b>	Tryptophan 5-hydroxylase 1
<b>Immunogen</b>	The antiserum was produced against synthesized peptide derived from human Tryptophan Hydroxylase. AA range:26-75
<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>Purification</b>	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.
<b>Dilution</b>	Western Blot: 1/500 - 1/2000. Immunohistochemistry: 1/100 - 1/300. Immunofluorescence: 1/200 - 1/1000. ELISA: 1/20000. Not yet tested in other applications.
<b>Concentration</b>	1 mg/ml
<b>Purity</b>	≥90%
<b>Storage Stability</b>	-20°C/1 year
<b>Synonyms</b>	TPH1; TPH; TPRH; TRPH; Tryptophan 5-hydroxylase 1; Tryptophan 5-monoxygenase 1
<b>Observed Band</b>	51kD
<b>Cell Pathway</b>	cytosol,neuron projection,
<b>Tissue Specificity</b>	[Isoform 2]: Seems to be less widely expressed than isoform 1.
<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.,

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**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 2009],

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**matters needing attention**

Avoid repeated freezing and thawing!

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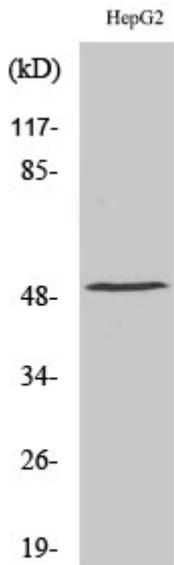
**Usage suggestions**

This product can be used in immunological reaction related experiments. For more information, please consult technical personnel.

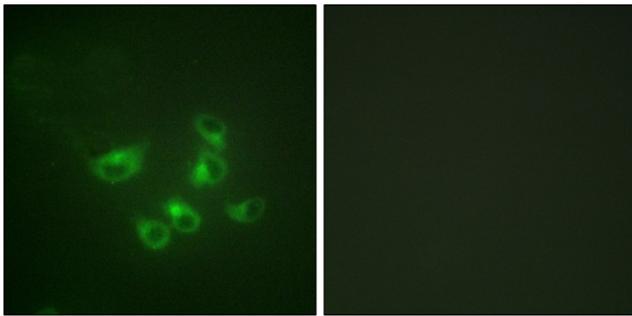
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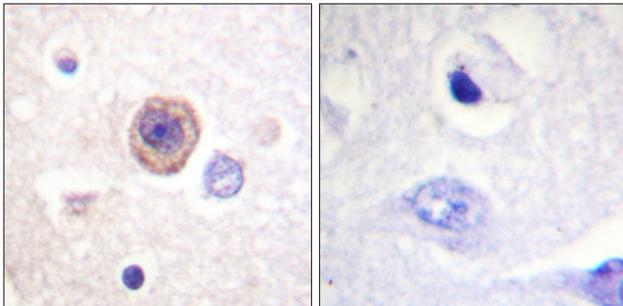
## Products Images



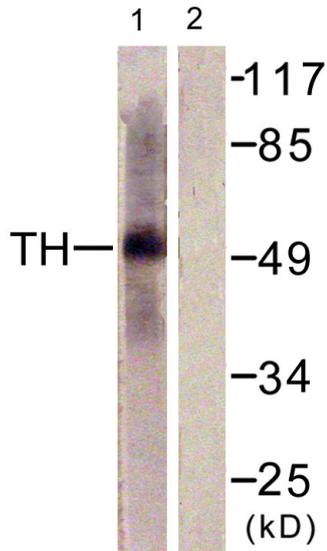
Western Blot analysis of various cells using TPH1 Polyclonal Antibody. Secondary antibody(catalog#:RS0002) was diluted at 1:20000



Immunofluorescence analysis of HepG2 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 HepG2 cells, using Tryptophan Hydroxylase Antibody. The lane on the right is blocked with the synthesized peptide.