Best Tools for immunology Research

TPH1 Polyclonal Antibody

Catalog No :	YT4709
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
Human Gene Id :	7166
Human Swiss Prot No :	P17752
Mouse Gene Id :	21990
Mouse Swiss Prot No :	P17532
Rat Gene Id :	24848
Rat Swiss Prot No :	P09810
Immunogen :	The antiserum was produced against synthesized peptide derived from human Tryptophan Hydroxylase. AA range:26-75
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;

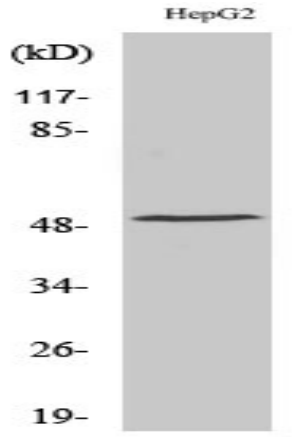
Background : This gene encodes a member of the aromatic amino acid hydroxylase family. The encoded protein catalyzes the first and rate limiting step in the biosynthesis of serotonin, an important hormone and neurotransmitter. Mutations in this gene have been associated with an elevated risk for a variety of diseases and disorders, including schizophrenia, somatic anxiety, anger-related traits, bipolar disorder, suicidal behavior, addictions, and others.[provided by RefSeq, Apr 2009],

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.,

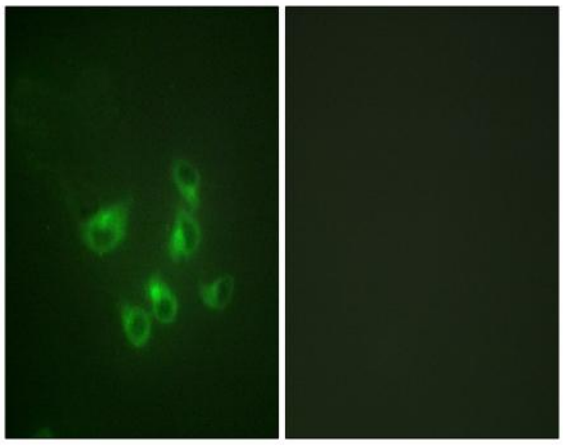
Subcellular Location : cytosol,neuron projection,

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

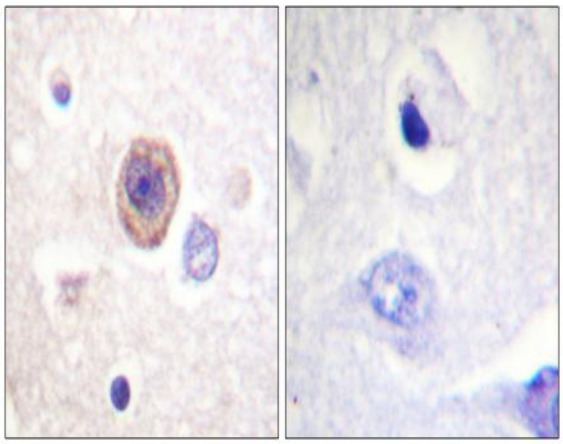
Products Images



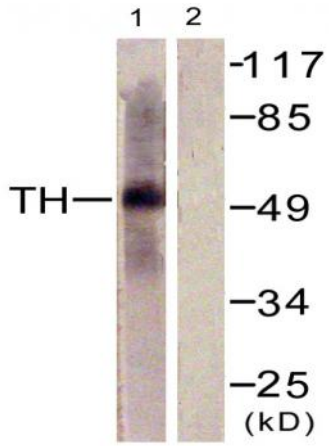
Western Blot analysis of various cells using TPH1 Polyclonal Antibody. Secondary antibody(catalog#:RS0002) was diluted at 1:20000



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.