Product Name: TH (phospho Ser62) Rabbit Polyclonal Antibody
Catalog #: APRab05552
For research use only.

Summary

Description	Rabbit polyclonal Antibody
Host	Rabbit
Application	WB,IHC,ICC/IF,ELISA
Reactivity	Human,Mouse,Rat,Monkey
Conjugation	Unconjugated
Modification	Phosphorylated
Isotype	IgG
Clonality	Polyclonal
Form	Liquid
Concentration	1mg/ml
Storage	Aliquot and store at -20°C (valid for 12 months). Avoid freeze/thaw cycles.
Shipping	Ice bags
Buffer	Liquid in PBS containing 50% glycerol, 0.5% protective protein and 0.02% New type preservative N.
Purification	Affinity purification

Application

Dilution Ratio	WB 1:500-1:2000,IHC 1:100-1:300,ICC/IF 1:50-1:200,ELISA 1:5000-1:10000
Molecular Weight	60kDa

Antigen Information

Gene Name	TH
Alternative Names	TH; TYH; Tyrosine 3-monooxygenase; Tyrosine 3-hydroxylase; TH
Gene ID	7054.0
SwissProt ID	P07101
Immunogen	The antiserum was produced against synthesized peptide derived from human Tyrosine Hydroxylase around the phosphorylation site of Ser31. AA range:1-50

Background

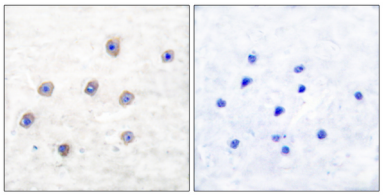
The protein encoded by this gene is involved in the conversion of tyrosine to dopamine. It is the rate-limiting enzyme in the

synthesis of catecholamines, hence plays a key role in the physiology of adrenergic neurons. Mutations in this gene have been associated with autosomal recessive Segawa syndrome. Alternatively spliced transcript variants encoding different isoforms have been noted for this gene. [provided by RefSeq, Jul 2008],catalytic activity:L-tyrosine + tetrahydrobiopterin + O(2) = 3,4-dihydroxy-L-phenylalanine + 4a-hydroxytetrahydrobiopterin.,cofactor:Fe(2+) ion.,disease:Defects in TH are the cause of dystonia DOPA-responsive autosomal recessive (ARDRD) [MIM:605407]; also known as autosomal recessive Segawa syndrome. ARDRD is a form of DOPA-responsive dystonia presenting in infancy or early childhood. Dystonia is defined by the presence of sustained involuntary muscle contractions, often leading to abnormal postures. Some cases of ARDRD present with parkinsonian symptoms in infancy. Unlike all other forms of dystonia, it is an eminently treatable condition, due to a favorable response to L-DOPA.,enzyme regulation:Phosphorylation leads to an increase in the catalytic activity.,function:Plays an important role in the physiology of adrenergic neurons.,online information:Tyrosine hydroxylase entry,pathway:Catecholamine biosynthesis; dopamine biosynthesis; dopamine from L-tyrosine: step 1/2.,similarity:Belongs to the biopterin-dependent aromatic amino acid hydroxylase family.,tissue specificity:Mainly expressed in the brain and adrenal glands.,

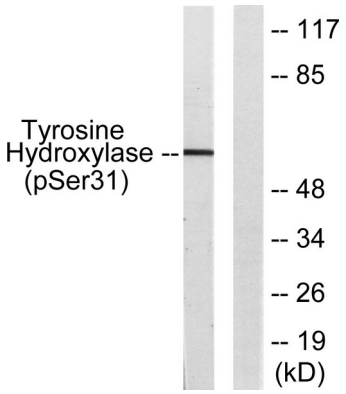
Research Area

Tyrosine metabolism;Parkinson's disease;

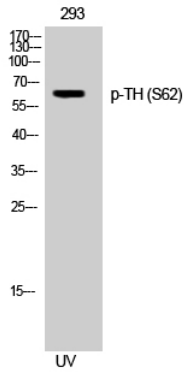
Image Data



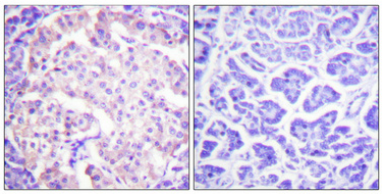
Immunohistochemistry analysis of paraffin-embedded human brain, using Tyrosine Hydroxylase (Phospho-Ser31) Antibody. The picture on the right is blocked with the phospho peptide.



Western blot analysis of lysates from 293 cells treated with UV 15 ', using Tyrosine Hydroxylase (Phospho-Ser31) Antibody. The lane on the right is blocked with the phospho peptide.



Western Blot analysis of 293 cells using Phospho-TH （S62） Polyclonal Antibody



Immunohistochemical analysis of paraffin-embedded Human pancreas. Antibody was diluted at 1:100 （4°,overnight） . High-pressure and temperature Tris-EDTA,pH8.0 was used for antigen retrieval. Negetive contrl （right） obtaned from antibody was pre-absorbed by immunogen peptide.