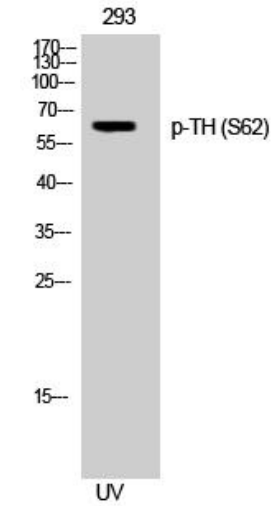
TH (phospho Ser62) Polyclonal Antibody

Catalog No	YP-Ab-02401
Isotype	IgG
Reactivity	Human;Mouse;Rat;Monkey
Applications	WB;IHC;IF;ELISA
Gene Name	TH
Protein Name	Tyrosine 3-monooxygenase (EC 1.14.16.2) (Tyrosine 3-hydroxylase) (TH),Tyrosine Hydrolase
Immunogen	The antiserum was produced against synthesized peptide derived from human Tyrosine Hydroxylase around the phosphorylation site of Ser31. AA range:1-50
Specificity	Phospho-TH (S62) Polyclonal Antibody detects endogenous levels of TH protein only when phosphorylated at S62.
Formulation	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Source	Polyclonal, Rabbit,IgG
Purification	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.
Dilution	WB: 1/500 - 1/2000. IHC: 1/100 - 1/300. ELISA: 1/5000.. IF 1:50-200
Concentration	1 mg/ml
Purity	≥90%
Storage Stability	-20°C/1 year
Synonyms	TH; TYH; Tyrosine 3-monooxygenase; Tyrosine 3-hydroxylase; TH
Observed Band	60kD
Cell Pathway	Cytoplasm, perinuclear region . Nucleus . Cell projection, axon . Cytoplasm . Cytoplasmic vesicle, secretory vesicle, synaptic vesicle . When phosphorylated at Ser-19 shows a nuclear distribution and when phosphorylated at Ser-31 as well at Ser-40 shows a cytosolic distribution (By similarity). Expressed in dopaminergic axons and axon terminals. .
Tissue Specificity	Mainly expressed in the brain and adrenal glands.
Function	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

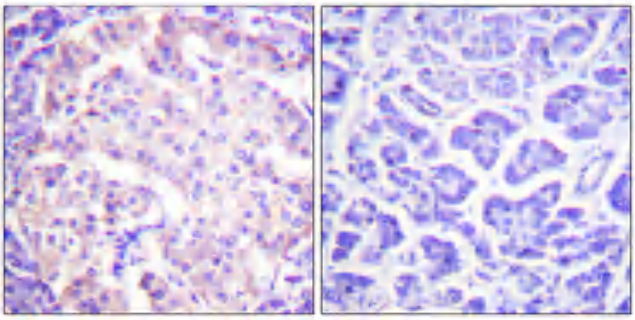
adrenergic neurons.,online information:Tyrosine hydroxylase entry,pathway:Ca

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],
matters needing attention	Avoid repeated freezing and thawing!
Usage suggestions	This product can be used in immunological reaction related experiments. For more information, please consult technical personnel.

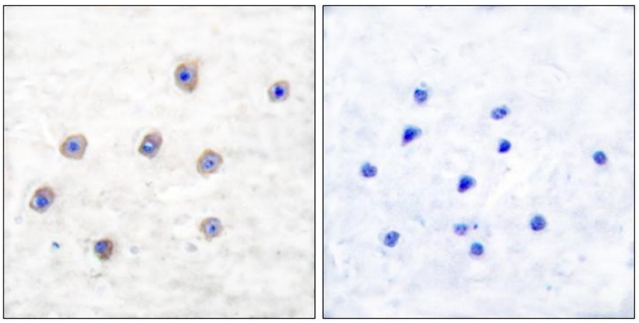
Products Images



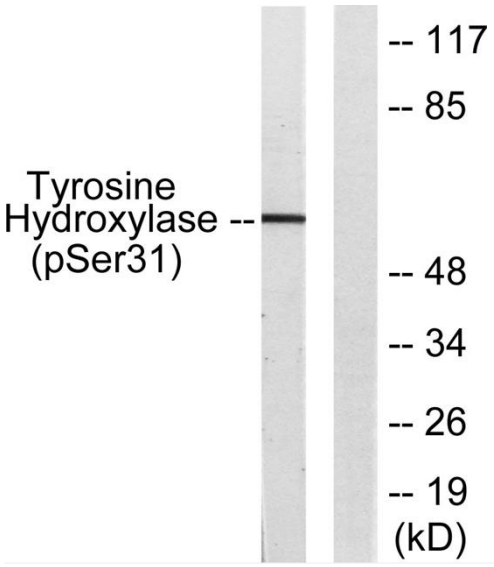
Western Blot analysis of 293 cells using Phospho-TH (S62) Polyclonal Antibody



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.



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.