

TH (phospho Ser19) Polyclonal Antibody

Catalog # AP67795

Product Information

Application	WB, IHC-P, IF
Primary Accession	P07101
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Calculated MW	58600

Additional Information

Gene ID	7054
Other Names	TH; TYH; Tyrosine 3-monooxygenase; Tyrosine 3-hydroxylase; TH
Dilution	WB~~Western Blot: 1/500 - 1/2000. Immunohistochemistry: 1/100 - 1/300. Immunofluorescence: 1/200 - 1/1000. ELISA: 1/5000. Not yet tested in other applications. IHC-P~~N/A IF~~1:50~200
Format	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.09% (W/V) sodium azide.
Storage Conditions	-20°C

Protein Information

Name	TH (HGNC:11782)
Synonyms	TYH
Function	Catalyzes the conversion of L-tyrosine to L- dihydroxyphenylalanine (L-Dopa), the rate-limiting step in the biosynthesis of catecholamines, dopamine, noradrenaline, and adrenaline. Uses tetrahydrobiopterin and molecular oxygen to convert tyrosine to L-Dopa (PubMed: 15287903 , PubMed: 1680128 , PubMed: 17391063 , PubMed: 24753243 , PubMed: 34922205 , PubMed: 8528210 , Ref.18). In addition to tyrosine, is able to catalyze the hydroxylation of phenylalanine and tryptophan with lower specificity (By similarity). Positively regulates the regression of retinal hyaloid vessels during postnatal development (By similarity).
Cellular Location	Cytoplasm, perinuclear region {ECO:0000250 UniProtKB:P24529}. Nucleus {ECO:0000250 UniProtKB:P04177} Cell projection, axon {ECO:0000250 UniProtKB:P24529}. Cytoplasm {ECO:0000250 UniProtKB:P04177}. Cytoplasmic vesicle, secretory vesicle, synaptic vesicle {ECO:0000250 UniProtKB:P04177}. Note=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. {ECO:0000250|UniProtKB:P04177}

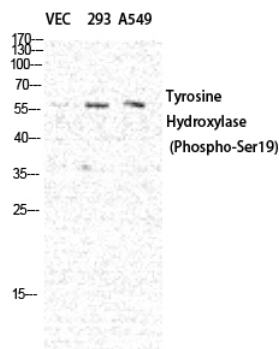
Tissue Location

Mainly expressed in the brain and adrenal glands.

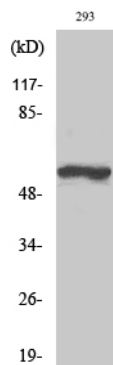
Background

Plays an important role in the physiology of adrenergic neurons.

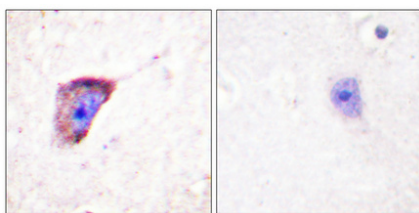
Images



Western Blot analysis of various cells using Phospho-TH (S19) Polyclonal Antibody diluted at 1 : 1000



Western Blot analysis of 293 cells using Phospho-TH (S19) Polyclonal Antibody diluted at 1 : 1000



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

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.