

Immunotag™ TH (phospho Ser19) Polyclonal Antibody

Antibody Specification	
Catalog No.	ITP0863
Product Description	Immunotag™ TH (phospho Ser19) Polyclonal Antibody
Size	50 µg, 100 µg
Conjugation	HRP, Biotin, FITC, Alexa Fluor® 350, Alexa Fluor® 405, Alexa Fluor® 488, Alexa Fluor® 555, Alexa Fluor® 594, Alexa Fluor® 647
IMPORTANT NOTE	This product is custom manufactured with a lead time of 3-4 weeks. Once in production, this item cannot be cancelled from an order and is not eligible for return.
Target Protein	TH (Ser19)
Clonality	Polyclonal
Storage/Stability	-20°C/1 year
Application	WB,IHC-p,IF,ELISA
Recommended Dilution	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.
Concentration	1 mg/ml
Reactive Species	Human,Mouse,Rat
Host Species	Rabbit
Immunogen	Synthesized phospho-peptide around the phosphorylation site of human TH (phospho Ser19)
Specificity	Phospho-TH (S19) Polyclonal Antibody detects endogenous levels of TH protein only when phosphorylated at S19.
Purification	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen
Form	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Gene Name	TH
Accession No.	P07101 P24529 P04177
Alternate Names	TH; TYH; Tyrosine 3-monooxygenase; Tyrosine 3-hydroxylase; TH

Antibody Specification

Description	tyrosine hydroxylase(TH) Homo sapiens 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],
Cell Pathway/ Category	Tyrosine metabolism,Parkinson's disease,
Protein Expression	Brain,Neuroblastoma,Pheochromocytoma,Placenta,Temporal cortex,Whole placenta,
Subcellular Localization	nucleus,cytoplasm,mitochondrion,smooth endoplasmic reticulum,cytosol,synaptic vesicle,cytoplasmic side of plasma membrane,dendrite,cytoplasmic vesicle,melanosome membrane,neuron projection,terminal bouton,perikaryon,
Protein 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: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.,
Usage	For Research Use Only! Not for diagnostic or therapeutic procedures.