

Product datasheet for **AP05905PU-N**

Tyrosine Hydroxylase (TH) pSer40 Rabbit Polyclonal Antibody

Product data:

Product Type:	Primary Antibodies
Applications:	IF, IHC, WB
Recommended Dilution:	Immunohistochemistry on frozen sections: 1:1000. Western Blot: 1:1000; detects a band of approximately 60kDa in PC-12 cell lysates, following stimulation by Okadaic acid. Immunofluorescence: 1:1000.
Reactivity:	Human, Mouse, Porcine, Rat
Host:	Rabbit
Isotype:	IgG
Clonality:	Polyclonal
Immunogen:	Synthetic phosphopeptide corresponding to an amino acid sequence within Tyrosine Hydroxylase which includes phosphorylated Ser 40.
Specificity:	This antibody reacts to is specific for Tyrosine Hydroxylase, when phosphorylated at serine 40.
Formulation:	10mM HEPES, pH7.5 containing 0.09% Sodium Azide, 0.01% Bovine Serum Albumin and 50% Glycerol State: Purified State: Liquid purified Ig
Purification:	Affinity chromatography
Conjugation:	Unconjugated
Storage:	Store the antibody undiluted at 2-8°C for one month or (in aliquots) at -20°C for longer. Avoid repeated freezing and thawing.
Stability:	Shelf life: one year from despatch.
Gene Name:	tyrosine hydroxylase
Database Link:	Entrez Gene 7054 Human P07101



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Background:

Tyrosine hydroxylase (TH) catalyzes the rate-limiting step in the biosynthetic pathway of the catecholamines dopamine (DA), norepinephrine, and epinephrine. The enzyme exists as a tetramer, with each subunit composed of an N-terminal regulatory domain and a C-terminal catalytic domain.

Phosphorylation of TH has been shown to occur at several serine residues. Phosphorylation at serine 40 results in an increase in hydroxylase activity, and phosphorylation at serine 19 is reported to promote phosphorylation of the serine 40 residue.

Tyrosine hydroxylase is regularly used as a marker for dopaminergic neurons, which is particularly relevant for research into Parkinson

Synonyms:

Tyrosine 3-hydroxylase, TYH