

## Anti-Tyrosine Hydroxylase (Ser40) Antibody

Our Anti-Tyrosine Hydroxylase (Ser40) rabbit polyclonal phosphospecific primary antibody from Phosph
Catalog # AN1600

### **Specification**

# Anti-Tyrosine Hydroxylase (Ser40) Antibody - Product Information

Application WB, IHC
Primary Accession P04177
Host Rabbit
Clonality Polyclonal Isotype IgG

Calculated MW 55966

# Anti-Tyrosine Hydroxylase (Ser40) Antibody - Additional Information

Gene ID **25085** 

#### **Other Names**

Dystonia 14 antibody, DYT14 antibody, DYT5b antibody, EC 1.14.16.2 antibody, OTTHUMP0000011225 antibody, OTTHUMP00000011226 antibody, ple antibody, Protein Pale antibody, TH antibody, The antibody, TY3H\_HUMAN antibody, TYH antibody, Tyrosine 3 hydroxylase antibody, Tyrosine 3 monooxygenase antibody, Tyrosine 3-hydroxylase antibody, Tyrosine 3-monooxygenase antibody, Tyrosine hydroxylase antibody

### Target/Specificity

Tyrosine hydroxylase (TH) is the rate-limiting enzyme in the synthesis of the catecholamines Dopamine and Norepinephrine. TH antibodies can therefore be used as markers for dopaminergic and noradrenergic neurons in a variety of applications including depression, schizophrenia, Parkinson's disease and drug abuse (Kish et al., 2001; Zhu et al., 2000; Zhu et al., 1999). TH antibodies can also be used to explore basic mechanisms of dopamine and norepinephrine signaling (Witkovsky et al., 2000; Salvatore et al., 2001; Dunkley et al., 2004). The activity of TH is also regulated by phosphorylation (Haycock et al., 1982; Haycock et al., 1992; Jedynak et al., 2002). Phospho-specific antibodies for the phosphorylation sites on TH can be used to great effect in studying this regulation and in identifying the cells in which TH phosphorylation occurs.

#### **Dilution**

WB~~1:1000 IHC~~1:100~500

### **Format**

Antigen Affinity Purified from Pooled Serum

## **Storage**

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

#### **Precautions**

Anti-Tyrosine Hydroxylase (Ser40) Antibody is for research use only and not for use in diagnostic or therapeutic procedures.



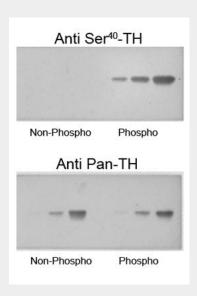
**Shipping** Blue Ice

## Anti-Tyrosine Hydroxylase (Ser40) Antibody - Protocols

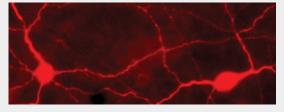
Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- <u>Immunohistochemistry</u>
- Immunofluorescence
- <u>Immunoprecipitation</u>
- Flow Cytomety
- Cell Culture

## Anti-Tyrosine Hydroxylase (Ser40) Antibody - Images



Western blot of recombinant phospho-TH and non-phospho-TH showing selective immunolabeling by the phosphospecific antibody of the  $\sim\!60$  kDa TH phosphorylated at Ser40. The pan-specific antibody (anti-pan-TH) recognized both the phospho- and non-phospho-TH; while most importantly, the phospho-specific antibody (anti-Ser40 TH) recognized only phospho-TH.



Immunostaining of light-stimulated rabbit retina showing labeling of TH when phosphorylated at Ser40.

# Anti-Tyrosine Hydroxylase (Ser40) Antibody - Background

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