

## Anti-Tryptophan Hydroxylase (Ser260) Antibody

Our Anti-Tryptophan Hydroxylase (Ser260) rabbit polyclonal phosphospecific primary antibody from Pho
Catalog # AN1595

### **Specification**

## Anti-Tryptophan Hydroxylase (Ser260) Antibody - Product Information

Primary Accession
Host
Clonality
Polyclonal
Isotype
Calculated MW
P09810
Rabbit
Polyclonal
IgG
51068

# Anti-Tryptophan Hydroxylase (Ser260) Antibody - Additional Information

Gene ID 24848

### **Other Names**

Indoleacetic acid 5 hydroxylase antibody, L tryptophan hydroxylase antibody, MGC119994 antibody, TPH 1 antibody, TPH 1 antibody, TPH1 antibody, TPH1\_HUMAN antibody, TPRH antibody, TRPH antibody, Tryptophan 5 hydroxylase 1 antibody, Tryptophan 5 monooxygenase 1 antibody, Tryptophan 5-hydroxylase 1 antibody, Tryptophan 5-monooxygenase 1 antibody, Tryptophan hydroxylase 1 antibody

### Target/Specificity

Tryptophan hydroxylase (TPH) catalyzes the 5-hydroxylation of tryptophan, which is the first step in the biosynthesis of indoleamines (serotonin and melatonin) (Martinez et al., 2001). In mammals, serotonin biosynthesis occurs predominantly in neurons which originate in the Raphe nuclei of the brain, and melatonin synthesis takes place within the pineal gland. Although TPH catalyzes the same reaction within the Raphe nuclei and the pineal gland, TPH activity is rate-limiting for serotonin but not melatonin biosynthesis. Serotonin functions mainly as a neurotransmitter, whereas melatonin is the principal hormone secreted by the pineal gland. The activity of TPH is enhanced by phosphorylation by cAMP-dependent protein kinase (PKA) and Ca2+/calmodulin kinase II (CaM K II) (Jiang et al., 2000; Johansen et al., 1996). CaM K II phosphorylates Ser-260 which lies within the regulatory domain of TPH (Jiang et al., 2000).

#### **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-Tryptophan Hydroxylase (Ser260) Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

### Shipping

Blue Ice

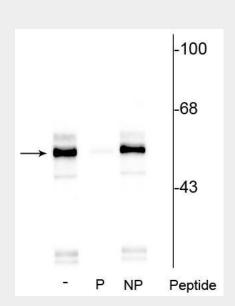


## Anti-Tryptophan Hydroxylase (Ser260) Antibody - Protocols

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-Tryptophan Hydroxylase (Ser260) Antibody - Images



Western blot of rat brainstem lysate showing specific immunolabeling of the  $\sim$ 55 kDa TPH protein phosphorylated at Ser260 in lane one (-). Phosphospecificity is shown in the second lane (P) where immunolabeling is blocked by preadsorption with the phosphopeptide used as antigen, but not by the corresponding non-phosphopeptide (NP), shown in the third lane.

# Anti-Tryptophan Hydroxylase (Ser260) Antibody - Background

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