

# Anti-Tryptophan Hydroxylase (Ser260) Antibody

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

## Product Information

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|-------------------|------------------------|
| Application       | WB                     |
| Primary Accession | <a href="#">P09810</a> |
| Host              | Rabbit                 |
| Clonality         | Polyclonal             |
| Isotype           | IgG                    |
| Calculated MW     | 51068                  |

## Additional Information

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| Gene ID            | 24848                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| Other Names        | Indoleacetic acid 5 hydroxylase antibody, L tryptophan hydroxylase antibody, MGC119994 antibody, TPH 1 antibody, TPH antibody, TPH1 antibody, TPH1_HUMAN antibody, TPRH antibody, TRPH antibody, Tryptophan 5 hydroxylase 1 antibody, Tryptophan 5 monooxygenase 1 antibody, Tryptophan 5 monooxygenase antibody, Tryptophan 5-hydroxylase 1 antibody, Tryptophan 5-monooxygenase 1 antibody, Tryptophan hydroxylase 1 antibody                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| Target/Specificity | <p>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 Ca<sup>2+</sup>/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).</p> |
| Dilution           | WB~~1:1000                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| 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.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |

## Background

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