

# Anti-Tryptophan Hydroxylase Antibody

Our Anti-Tryptophan Hydroxylase sheep polyclonal primary antibody from PhosphoSolutions is produced Catalog # AN1592

### Specification

# Anti-Tryptophan Hydroxylase Antibody - Product Information

Application	WB
Primary Accession	P17290
Host	Sheep
Clonality	Polyclonal
Isotype	IgG
Calculated MW	51118

## Anti-Tryptophan Hydroxylase Antibody - Additional Information

Gene ID Other Names 100009100

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

Tryptophan hydroxylase (TPH) catalyzes the first step in the biosynthesis of serotonin and melatonin (Martinez et al., 2001). Thus, expression of TPH can be used as an indicator of the localization of serotonin and melatonin in brain. 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 (Haycock et al., 2002). 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 (Martinez et al., 2001).

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 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Shipping Blue Ice



# Anti-Tryptophan Hydroxylase Antibody - Protocols

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

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

# Anti-Tryptophan Hydroxylase Antibody - Images



Western blot of human dorsal Raphe nucleus showing specific immunolabeling of the  $\sim$ 55 kDa tryptophan hydroxylase protein.

## Anti-Tryptophan Hydroxylase Antibody - Background

Tryptophan hydroxylase (TPH) catalyzes the first step in the biosynthesis of serotonin and melatonin (Martinez et al., 2001). Thus, expression of TPH can be used as an indicator of the localization of serotonin and melatonin in brain. 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 (Haycock et al., 2002). 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 (Martinez et al., 2001).