

Anti-Tryptophan Hydroxylase (Ser58) Antibody

Our Anti-Tryptophan Hydroxylase (Ser58) rabbit polyclonal phosphospecific primary antibody from Phos
Catalog # AN1594

Product Information

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

Additional Information

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	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) Both PKA and CaM K II phosphorylate Ser-58 which lies within the regulatory domain of TPH (Kuhn et al., 1997).
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 (Ser58) 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'.