10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

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, OTTHUMP00000011225 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.

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

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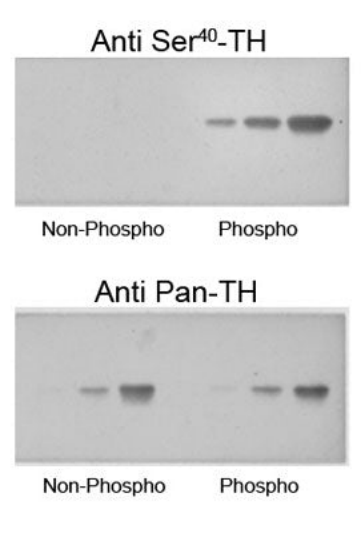
Anti-Tyrosine Hydroxylase (Ser40) Antibody - Protocols

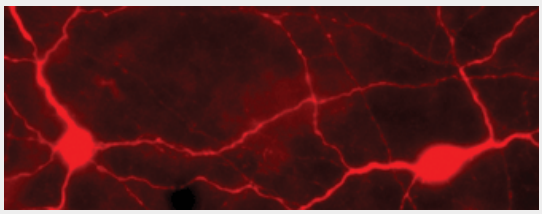
Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- 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 ~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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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.