

**Anti-Tyrosine Hydroxylase (Ser31) Antibody**  
**Our Anti-Tyrosine Hydroxylase (Ser31) rabbit polyclonal phosphospecific primary antibody from Phosph**  
**Catalog # AN1599**

## Specification

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### Anti-Tyrosine Hydroxylase (Ser31) Antibody - Product Information

|                   |                        |
|-------------------|------------------------|
| Application       | WB, IHC                |
| Primary Accession | <a href="#">P04177</a> |
| Reactivity        | Bovine                 |
| Host              | Rabbit                 |
| Clonality         | Polyclonal             |
| Isotype           | IgG                    |
| Calculated MW     | 55966                  |

### Anti-Tyrosine Hydroxylase (Ser31) 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.

#### Dilution

WB~~1:1000  
IHC~~1:100~500

#### 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.

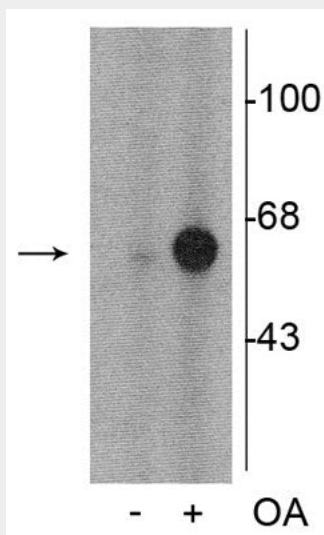
#### Precautions

Anti-Tyrosine Hydroxylase (Ser31) Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

**Shipping**  
Blue Ice**Anti-Tyrosine Hydroxylase (Ser31) 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 Cytometry](#)
- [Cell Culture](#)

**Anti-Tyrosine Hydroxylase (Ser31) Antibody - Images**

Western blot of PC-12 cell lysate incubated in the absence (-) and presence (+) of okadaic acid (OA, 1  $\mu$ M for 60 min) showing specific immunolabeling of the ~60 kDa tyrosine hydroxylase phosphorylated at Ser31.

**Anti-Tyrosine Hydroxylase (Ser31) Antibody - Background**

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