10320 Camino Santa Fe, Suite G
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Phospho-Ser31 Tyrosine Hydroxylase Antibody

Affinity purified rabbit polyclonal antibody
Catalog # AN1031

Specification

Phospho-Ser31 Tyrosine Hydroxylase Antibody - Product Information

Application	**WB**
Primary Accession	P04177
Reactivity	**Mouse, Rat**
Predicted	**Monkey**
Host	**Rabbit**
Clonality	**polyclonal**
Calculated MW	**60 KDa**

Phospho-Ser31 Tyrosine Hydroxylase Antibody - Additional Information

Gene ID	**25085**
Gene Name	**TH**

Other Names
Tyrosine 3-monooxygenase, Tyrosine 3-hydroxylase, TH, Th

Target/Specificity
Synthetic phospho-peptide corresponding to amino acid residues surrounding Ser31 conjugated to KLH.

Dilution
WB~~ 1:1000

Format
Prepared from rabbit serum by affinity purification via sequential chromatography on phospho- and dephosphopeptide affinity columns.

Antibody Specificity
Specific for the ~60k tyrosine hydroxylase protein phosphorylated atSer31.

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

Shipping
Blue Ice

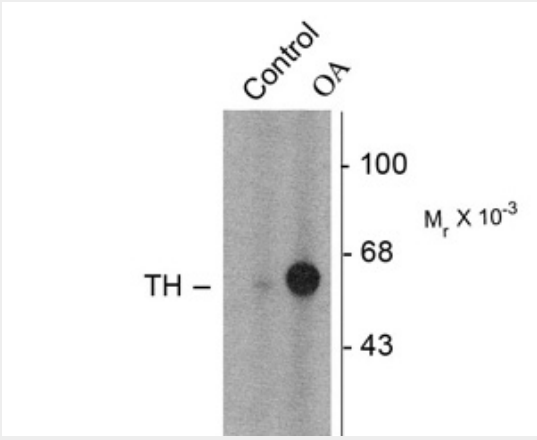
Phospho-Ser31 Tyrosine Hydroxylase Antibody - Protocols

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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

Phospho-Ser31 Tyrosine Hydroxylase Antibody - Images



Western blot of PC-12 cells incubated in the absence (Control) and presence of okadaic acid (OA, 1 µM for 60 min) showing specific immunolabeling of the ~60k TH phosphorylated at Ser31.

Phospho-Ser31 Tyrosine Hydroxylase Antibody - Background

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.

Phospho-Ser31 Tyrosine Hydroxylase Antibody - References

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